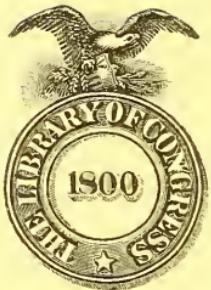


GYMNASTIC  
NOMENCLATURE  
ILLUSTRATED





Class GY 461

Book P 58

Copyright No. \_\_\_\_\_

**COPYRIGHT DEPOSIT**





# Gymnastic Nomenclature

OF THE

## Young Men's Christian Associations of North America

---

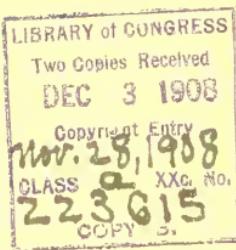
### Fourth Edition

Revised and Edited by the Nomenclature Committee of the Physical  
Directors' Society of the Young Men's Christian Association

---

1908  
1908

New York  
Young Men's Christian Association Press  
Nineteen Hundred Eight



Copyright, 1908, by  
The International Committee of  
Young Men's Christian Associations

### Note to First Edition

The following terms and definitions are substantially as recommended by the Conference of Physical Directors in 1892 and 1893. Some additions, a few changes recommended by the Conference of 1894, and some necessary corrections have been made by Geo. W. Ehler.

The Committee would urge upon every physical director the necessity of the general use of this system of nomenclature in all local work as an indispensable means toward the unifying of the physical work of the Associations.

---

### Note to Second Edition

The Physical Directors' Conferences of the East and West revised this nomenclature and the Governing Committee has incorporated all suggestions which were adopted by both Conferences.

---

### Note to Third Edition

The Physical Directors' Society of the Young Men's Christian Association of North America, during its session at Lakewood Conference in 1903, appointed the following committee to revise the gymnastic

nomenclature: HENRY F. KALLENBERG, M. D., Chairman, Chicago; WILLIAM E. DAY, Dayton, Ohio; GEORGE M. MARTIN, New Haven, Conn.

The committee has considered in its work the previous nomenclature, the results of the study of the individual members of the committee, the work of the committee appointed by the Thousand Island Park Conference of 1900, suggestions from prominent physical directors, and the graduating theses on gymnastic nomenclature by W. E. DAY and R. F. SEYMOUR, graduates, respectively, of the Chicago and Springfield Training Schools.

It has been deemed unnecessary as well as impossible to put in print every possible movement, but the committee has endeavored to incorporate fundamental principles which should form a basis and guide for the naming of most of the movements not covered by the text of *Gymnastic Nomenclature*.

This scheme, as presented at the St. Louis Conference of the Physical Directors' Society, was unanimously adopted as the official nomenclature and is recommended to all associations for adoption.

#### Note to Fourth Edition

At the Niagara Conference of 1905 the Committee on Nomenclature presented a nomenclature for Indian clubs which was adopted. At the Indianapolis Conference of 1906 the nomenclature for mat work and

tumbling was adopted. At the Washington Conference of 1907 the committee's recommendation, that the nomenclature for indian clubs, mat work and tumbling be incorporated in the next edition of the gymnastic nomenclature and that the entire book be illustrated, was adopted.

The committee is indebted to Mr. A. B. Wegener for the splendid and accurate drawings. Some valuable additions have been made to the text, but no radical changes from the third edition have been made.

COMMITTEE ON NOMENCLATURE.

HENRY F. KALLENBERG, M. D.,  
*Chairman and Editor.*

ALBERT B. WEGENER,  
WILLIAM J. DAVISON,  
ELMER BERRY,  
WILLIAM E. DAY,  
WILLIAM Y. REITHARD.



# CONTENTS

## A. CALISTHENICS

	PAGE
<b>GENERAL TERMS:</b>	
<i>Calisthenics Defined</i> .....	1
<i>Body, Divisions of</i> .....	1
<i>Axes</i> .....	1
<i>Planes</i> .....	2
<i>General Movements</i> .....	2
<b>DIRECTIONS:</b>	
<i>Circles</i> .....	3
<i>Other Movements</i> .....	4
<b>POSITIONS:</b>	
<i>Trunk and Lower Extremities</i> .....	5
<i>Upper Extremities</i> .....	15
<b>MOVEMENTS:</b>	
<i>Trunk</i> .....	17
<i>Head</i> .....	21
<i>Upper Extremities</i> .....	23
<i>Lower Extremities</i> .....	27
<b>COMMANDS</b> .....	34

## B. EXERCISES ON APPARATUS

<b>DEFINITION</b> .....	39
<b>GENERAL TERMS</b> .....	39
<b>POSITIONS:</b>	
<i>General Position Described</i> .....	41
<i>Grasps</i> .....	43
<i>Seats</i> .....	47
<i>Rests</i> .....	51
<i>Hangs</i> .....	57

<i>Miscellaneous:</i>	PAGE
<i>Balances</i> .....	65
<i>Lever</i> .....	67
<b>MOVEMENTS:</b>	
<i>Swings</i> .....	69
<i>Circles</i> .....	85
<i>Vaults</i> .....	99
<i>Miscellaneous:</i>	
Approach and Retreat.....	107
Mounts .....	107
Dismounts .....	111
Traveling .....	113
Vault Swing .....	113
Dive .....	113
Pike Jump .....	113
Cut-off .....	114

## C. MAT WORK AND TUMBLING

### MAT WORK

GENERAL TERMS .....	115
DIRECTIONS (See Other Movements).....	4
MOVEMENTS .....	115
<i>Jump, Hop, Leap and Step</i> .....	115
<i>Frog Jump</i> .....	116
<i>Hand and Foot Travel</i> .....	116
<i>Leap Frog</i> .....	117

### TUMBLING

GENERAL TERMS .....	117
DIRECTIONS (See Circles).....	3
MOVEMENTS—INDIVIDUAL:	
<i>Body Circles</i> .....	118
<i>Upstarts</i> .....	121
<i>Balance</i> .....	123

<b>MOVEMENTS—DOUBLE:</b>	
<i>Vaults</i> .....	123
<i>Body Circles</i> .....	127
<i>Balance</i> .....	137
<b>MOVEMENTS—MISCELLANEOUS:</b>	
<i>Cart Wheel</i> .....	139
<i>Back Rolls</i> .....	139
<i>Toss Between the Legs</i> .....	140
<i>Head Throw</i> .....	141
<i>Toss Over Head</i> .....	142
 <b>D. INDIAN CLUBS</b>	
<b>NOTE</b> .....	143
<b>GENERAL TERMS</b> .....	143
<b>POSITIONS</b> .....	144
<b>DIRECTIONS</b> .....	145
<b>CIRCLES</b> .....	145
<b>SWINGS</b> .....	154
<b>ABBREVIATIONS</b> .....	157
 <b>APPENDIX</b> .....	159



## A. CALISTHENICS

### I. GENERAL TERMS.

1. CALISTHENICS comprise all exercises with movable hand apparatus as dumb-bells, wands, indian clubs, etc., and all exercises without such apparatus except marching, maze running and gymnastic dancing.
2. THE BODY is divided for convenience as follows:
  - (1) *Trunk.*
  - (2) *Head.*
  - (3) *Upper extremities:*
    - a. *Arm* (shoulder to elbow).
    - b. *Forearm* (elbow to wrist).
    - c. *Hand* (wrist to fingers).
    - d. *Fingers.*
  - (4) *Lower extremities:*
    - a. *Thigh* (hip to knee).
    - b. *Leg* (knee to ankle).
    - c. *Foot.*
3. AXES. The three axes considered are (see figures A and B appendix).
  - (1) The *Vertical Axis* corresponds to the spinal column, in whatever position.

(2) The *Horizontal Axis* corresponds with or is parallel to a line drawn through the shoulders at right angles to the vertical axis.

(3) The *Antero-Posterior Axis* corresponds with or is parallel to a line drawn from front to back at right angles to the vertical and horizontal axis.

4. PLANES. The three planes considered are (see figures A and B appendix).

(1) The *Lateral Plane* containing the vertical and horizontal axes.

(2) The *Antero-Posterior Plane* containing the vertical and antero-posterior axes.

(3) The *Horizontal Plane* containing the antero-posterior and the horizontal axes.

5. GENERAL MOVEMENTS.

(1) *Abduction.* A movement of any member away from the median line of the antero-posterior plane; or, in case of the fingers, away from the median line of the hand.

(2) *Adduction.* A movement of any member toward or across the median line of the antero-posterior plane.

(3) *Circumduction.* A movement of the trunk or any extremity in which the part farthest

from the center of motion describes a circle, the member itself, up to the center of motion, describing a cone. The term *circle* is used interchangeably with *circumduction* in movements of the limbs.

(4) *Flexion.* The term *flexion* is applied only to the extremities and in gymnastic use means the moving of a whole or part of an extremity, except the head, in the direction in which it can be most closely approximated.

a. *Full.* The member is flexed to its fullest extent.

b. *Half.* The member is flexed 90° approximately, depending upon the part involved.

(5) *Bend.* The term *bend* is used to designate motion in a joint.

(6) *Rotation.* Rotation is the turning of the trunk or any of the extremities upon its long axis. (Syn.—*tortion, twisting.*)

(7) *Extension.* The reverse of *flexion.*

## II. DIRECTIONS.

1. **CIRCLES.** The direction for all circles whether of the trunk or extremities is determined by the axis about and the plane in which the move-

ment is executed in relation to the position of the individual to a clock placed:

(1) On the floor and facing upward. In this case circles in the direction of the motion of the clock hands are *right*. *Left* circles are in the opposite direction.

(2) In front of and facing the individual. Direction of circles same as in (1).

(3) At the left side of and facing the individual. In this case circles in the direction of the motion of the clock hands are *front* or *forward*. *Back* or *backward* circles are in the opposite direction. (See figures D, E and F appendix).

2. OF OTHER MOVEMENTS. The direction of all other movements, such as lowering of the trunk, arm swings, charges, toe touches (see pages 9 and 25), are determined by the relation of the individual in the center of a circle to the points of a compass. (See figure C appendix).

(1) *Forward*. The direction in which the individual is facing.

(2) *Backward*. The opposite of forward.

(3) *Right*. Toward the right.

(4) *Left*. Toward the left.

(5) *Oblique*. Midway between the four points of the compass as indicated.

NOTE.—All exercises, unless otherwise directed, should be done to the left first, and when the limbs perform separate movements the first named shall be done to the left.

## III. POSITIONS.

## 1. OF TRUNK AND LOWER EXTREMITIES.

(1) *Attention.* The position of attention is with heels together, arms down and at the sides, chin in, chest forward and hips slightly back; i. e., in line with heels and shoulder. Fig. A1.

a. The position of attention in *dumb-bell* and also *free-hand* movements is the same as in (1). Fig. A2.

b. The position of attention for *wand* or *bar-bell* exercises is with arms down, bar across the thighs, hands grasping the wand with palms toward body and dividing the wand or bar-bell into thirds. Fig. A3.

c. The position of attention in *indian club* exercises is with the hands holding the club and down at the side. Fig. A4.



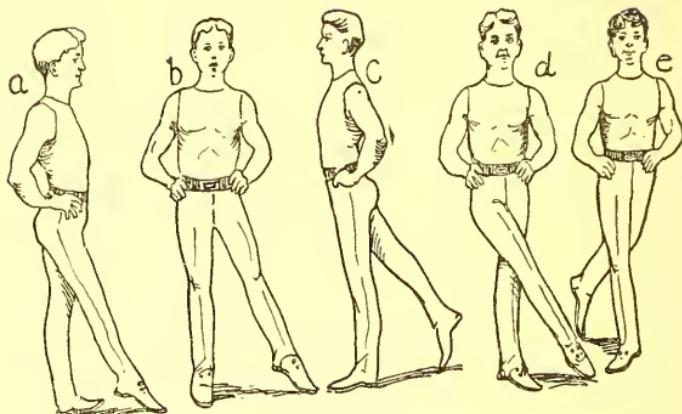


Fig. A9

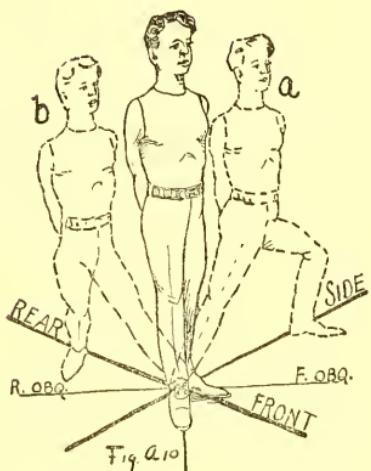


Fig. A10

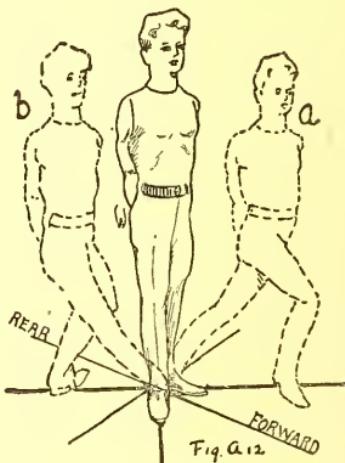
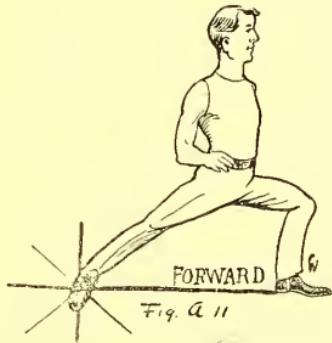


Fig. A12

(7) *Toe-Touch.* One foot is advanced in the direction indicated, foot extended, toes touching the floor; other foot in place and supporting entire weight of body. Fig. A9 (*a, b, c, d* and *e*).

(8) *Charge.* One foot is advanced two foot lengths from heel to heel in the direction indicated, knee bent and directly over the instep. Most of the weight is on this foot. The other foot is kept in place with the knee straight. Both heels are on the floor, body erect on the hips and facing forward. Fig. A10.

(9) *Lunge.* This is as in *charge*, except that the moving foot is advanced as far as possible. Fig. A11.



(10) *Cross-Charge, Toe-Touch or Lunge.* A movement of either leg in manner indicated, to the oblique or rear oblique of opposite side. Fig. A12.

NOTE.—The direction of a *toe-touch*, *charge* or *lunge* may be as illustrated in figure *c*, appendix.

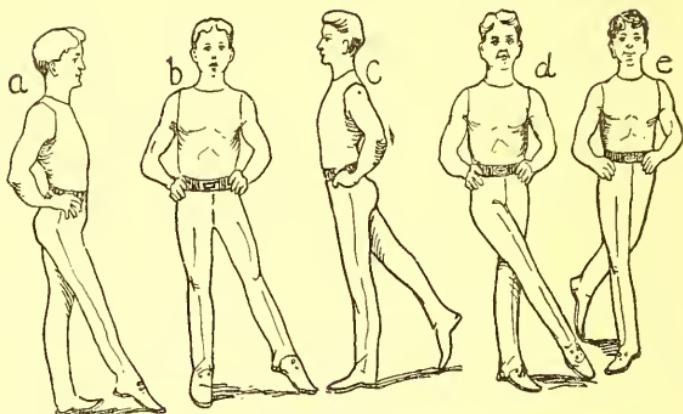


Fig. A9

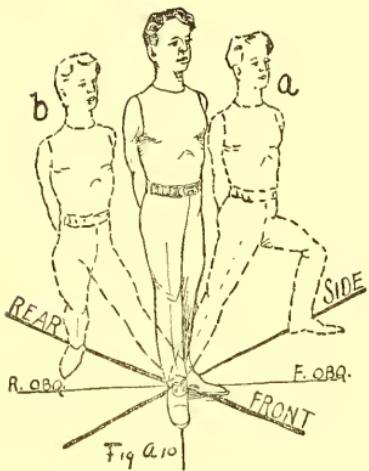


Fig. A10

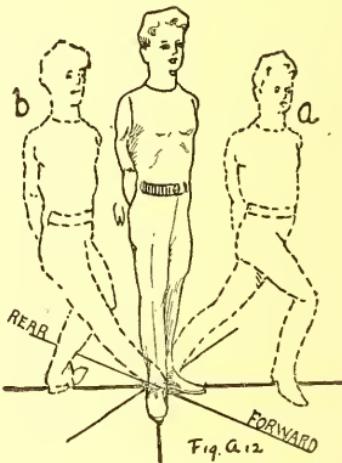
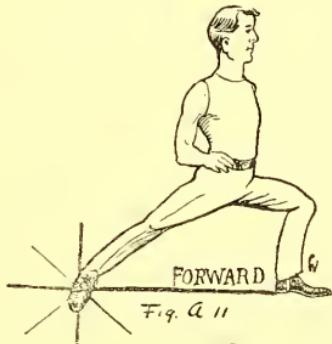


Fig. A12

(7) *Toe-Touch.* One foot is advanced in the direction indicated, foot extended, toes touching the floor; other foot in place and supporting entire weight of body. Fig. A9 (a, b, c, d and e).

(8) *Charge.* One foot is advanced two foot lengths from heel to heel in the direction indicated, knee bent and directly over the instep. Most of the weight is on this foot. The other foot is kept in place with the knee straight. Both heels are on the floor, body erect on the hips and facing forward. Fig. A10.

(9) *Lunge.* This is as in *charge*, except that the moving foot is advanced as far as possible. Fig. A11.



(10) *Cross-Charge, Toe-Touch or Lunge.* A movement of either leg in manner indicated, to the oblique or rear oblique of opposite side. Fig. A12.

NOTE.—The direction of a *toe-touch*, *charge* or *lunge* may be as illustrated in figure c, appendix.

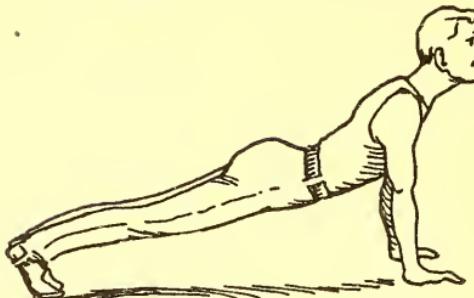


Fig. Q 13

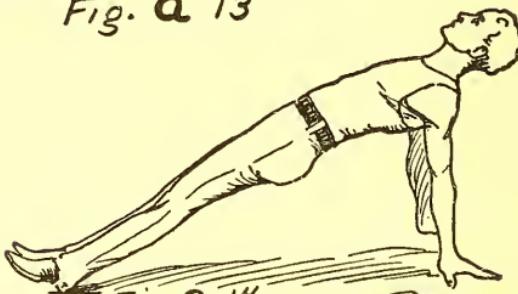
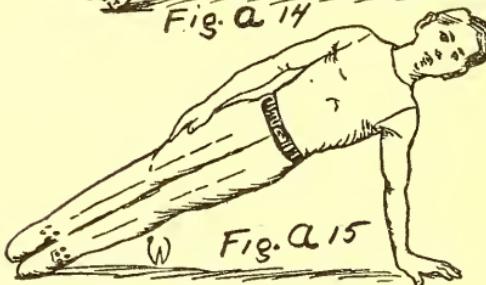


Fig. Q 14



W Fig. Q 15

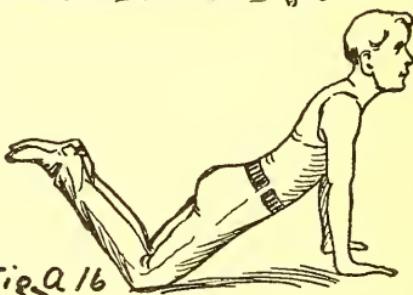


Fig. Q 16

(11) *Leaning Rest.* The body is supported by the hands and knees or feet.

*a. Front.* The body is facing downward and supported by the hands and feet, thighs extended. When the forearms are flexed it is called *bent arm leaning rest*. Fig. A13.

*b. Back.* The body is facing upward and is supported on the hands and feet, thighs and legs extended. This rest may be with the legs flexed or with the thighs and legs flexed. Fig. A14.

*c. Side.* Side of body toward the floor. The body may be supported on one or both hands or on one or both feet—one unless otherwise indicated. Fig. A15.

*d. Knee.* Body facing downward and supported by the hands and knees. Fig. A16.

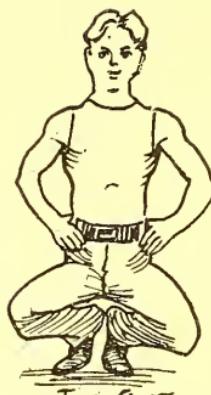


Fig. A 17

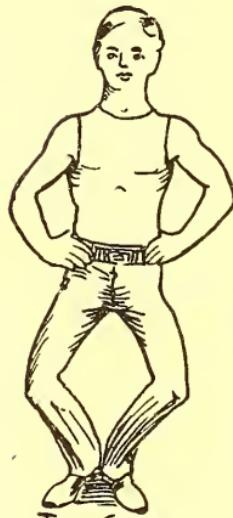


Fig. A 18

(12) *Knee Bend.* A position arrived at by lowering the body, thighs and legs flexed to their fullest extent, body erect on hips, knees outward, heels raised. This position is called a *full knee bend*. Fig. A17.

(13) *Half Knee Bend.* Body is lowered half the distance, heels remaining on the floor. Fig. A18.

(14) *Knee Bend-Rest.* With hands resting on floor, body slightly inclined forward, arms between knees. Fig. A19.



Fig. A19

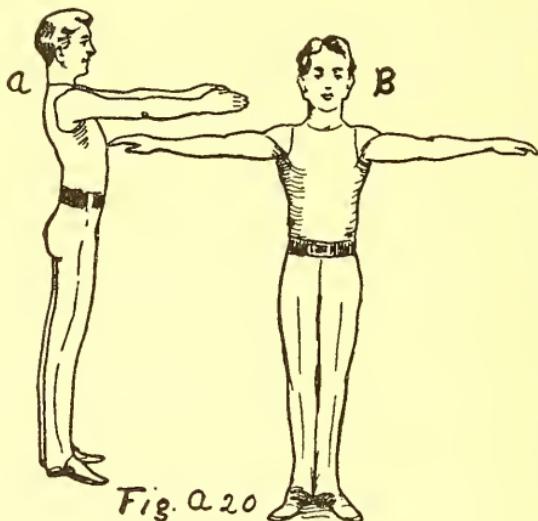


Fig. A 20

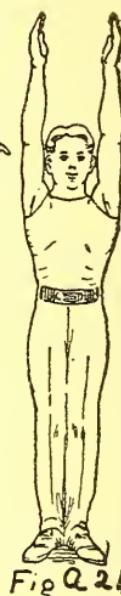


Fig. A 21

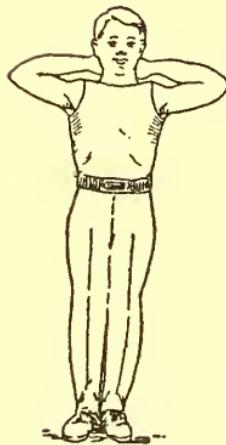


Fig. A 23



Fig. A 22

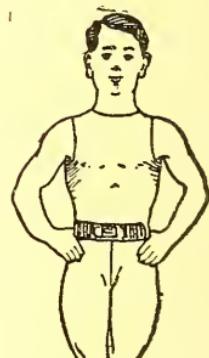


Fig. A 24

## 2. OF UPPER EXTREMITIES.

(1) *Horizontal.* Arms on a level with the shoulders, in any direction in the horizontal plane, as front, front oblique, side, rear oblique; forearm, hand and fingers extended. Position of palms at front or front oblique toward each other; at the side palms down. Fig. A20 (*a* and *b*).

(2) *Vertical.* Arms, forearms, hands and fingers extended upward with palms inward, unless otherwise directed. Fig. A21.

(3) *Head Clasp.* Hands clasped high on back of head; elbows back as far as possible, chin in. Fig. A22.

(4) *Neck Clasp.* Hands clasped on back of neck, elbows back as far as possible, chin in. Fig. A23.

(5) *Hip Clasp.* The hands clasp the waist immediately above the hips. The fingers are held together in front and the thumbs are behind; the palms of the hands rest fully upon the hips and the elbows are drawn slightly backward. Fig. A24.

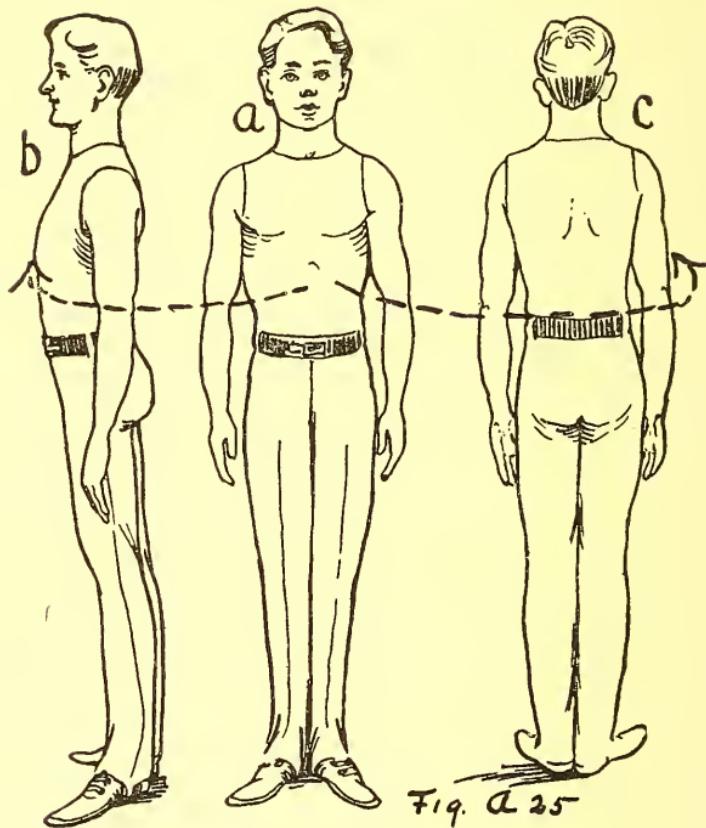


Fig. A 25

## IV. MOVEMENTS.

## 1. OF TRUNK.

(1) *Turns.* Used in reference to rotations above the vertical axis.

*a. Right.* In the direction in which the hands of a clock move, the clock regarded as on the floor, face up. (If the body is brought into a position in which the head is downward the clock shall still be regarded as upon the floor.) Turns may be designated by fractions, as quarter, half, three-quarter, full or complete. Quarter right turn is equivalent to *right face* of military drill, Fig. A25 a-b, half right turn to *about face*.

*b. Left.* The reverse of *right*. Fig. A25 a-c is left about face.

(2) *Circles.* Rotations about horizontal or antero-posterior axes.

*a.* Circles about the horizontal axis in the antero-posterior plane. Those are named with reference to a clock placed at the left side, facing the body. Circles in the direction of the motion of the clock hands are *front* or *forward* circles. When executed on the floor as a movement of progression, or correspondingly on apparatus (as the parallel bars), these are called *forward rolls*. Backward circles or rolls are in the opposite direction. Somersaults are forward or backward circles, but are made in the air without support.

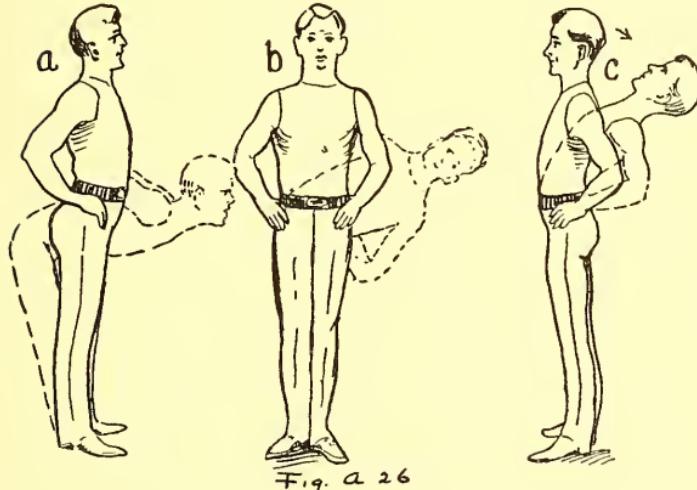
*b.* Circles about the antero-posterior axis and in the lateral plane are named from the motion of the clock hands placed in front of and facing the body. Right circles, *with* the hands of the clock; left, *against* the hands of the clock.

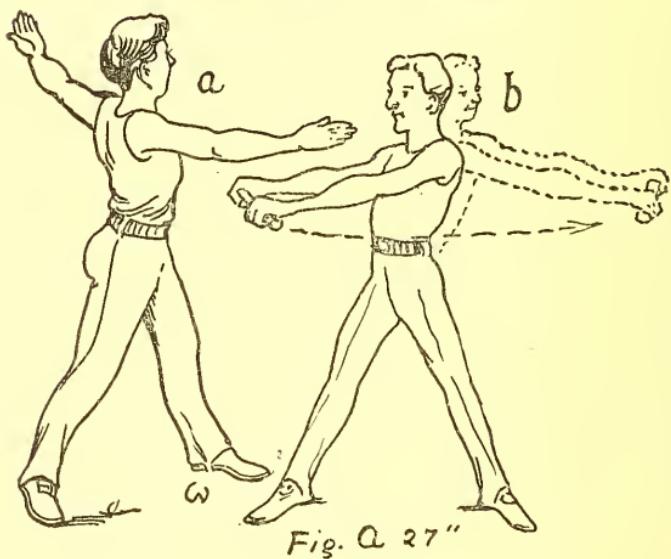
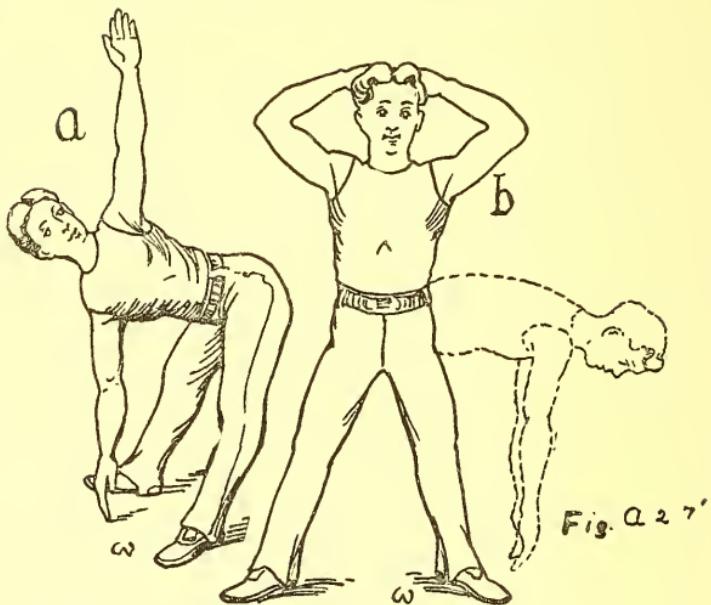
(3) *Bending* (Lowering). With the hips or waist as the center of motion. Direction named as for *charge*, but always with reference to position of trunk.

*a. Forward. b. Side. c. Backward.*

Fig. A26 (*a*, *b* and *c*).

Example—If trunk is rotated to the right, a forward bend will be in the direction in which the individual is facing. Fig. A27'-*a* illustrates “forward bend (lower) and rotate with arms at side horizontal.” Fig. A27'-*b* illustrates “rotate and forward bend (lower), swinging arms from head to floor.”





(4) *Rotation.* About the spinal column as an axis, feet remaining stationary, hips firm. Direction, right or left, as for *turns*. Fig. A27'-*a* (forward bend (lower) and rotation). Fig. A27'-*b* (rotation and forward bend (lower)). A27'' (simple rotation).

(5) *Circumduction.* About the lumbar vertebrae as a center. Direction right or left as for *turns*. Fig. A28.

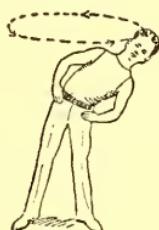


Fig. A 28

## 2. OF THE HEAD.

(1) *Lowering*, Fig. A29 *a-b-c*. (2) *Rotation*, Fig. A29-*d*. (3) *Circumduction*, Fig. A29-*e*. (4) *Projection and Retraction*, Fig. A29-*f-g*. (Chin is kept at same level throughout.)

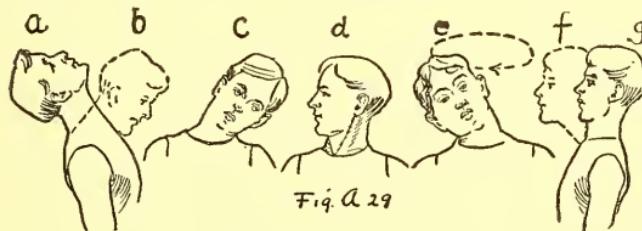


Fig. A 29

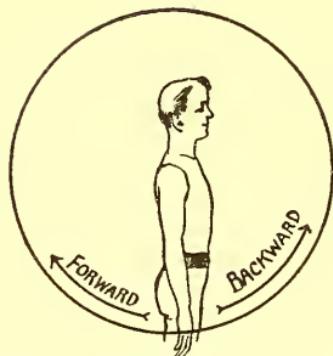


Fig. A 30.

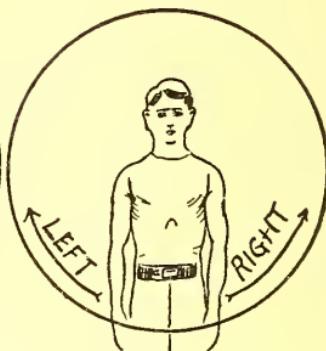


Fig. A 31.

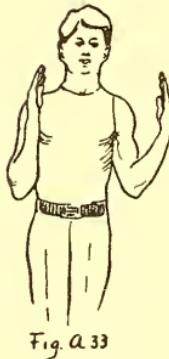


Fig. A 33

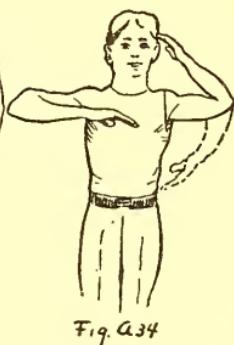


Fig. A 34

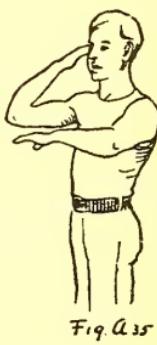


Fig. A 35

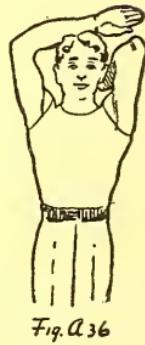


Fig. A 36

## 3. OF UPPER EXTREMITIES.

(1) *Arm Circles.*

*a. Forward and Backward.* Front and back about horizontal axis in antero-posterior plane, clock as in similar body circles. Fig. A30 left drawing.

*b. Right and Left.* About antero-posterior axis in lateral plane, clock as in similar body circles. Fig. A31 right drawing.

(2) *Rotation.* About the long axis of the part involved. The whole limb (Fig. A32 *a, b*), or the forearm alone, may be rotated. Fig. A32 (*a, c*).

(3) *Flexion.* Bending at elbow, wrist or finger joints, that is, forearm, hand or finger flexion.

*a. Arms down.* Forearms may be flexed forward or sideward. Fig. A33.

*b. Arms at side horizontal.* Forearms may be flexed forward, downward or upward. Fig. A34.

*c. Arms at front horizontal.* Forearms may be flexed inward (right to left and vice versa) or upward. Fig. A35.

*d. Arms at vertical.* Forearms may be flexed backward or inward. Fig. A36.

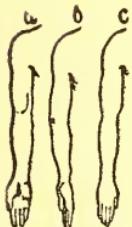
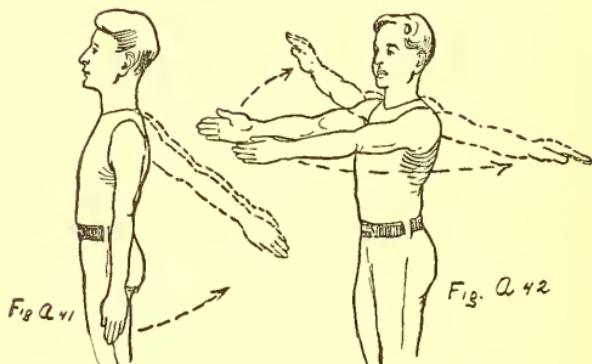
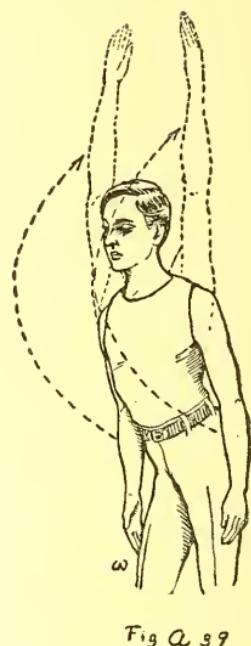
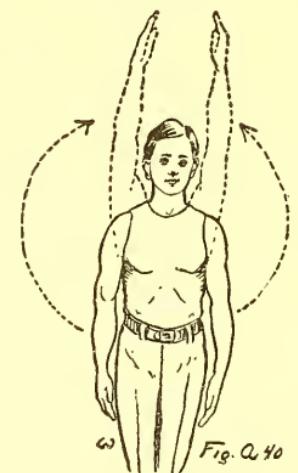
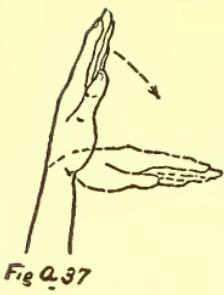


Fig. A 32



- e. *Hands.* Fig. A37.
- f. *Fingers.* Fig. A38.

(4) *Arm Swings.* Movements of whole limb from shoulder, through fraction of a circle.

- a. *Upward.*

- (a) *Forward.* From position of *attention* to front horizontal.

- (b) *Fore-upward.* From position of *attention* to vertical or from first horizontal to vertical. Fig. A39.

- (c) *Sideward.* From position of *attention* to side horizontal.

- (d) *Side-upward.* From position of *attention* to vertical or from side horizontal to vertical. Fig. A40.

- b. *Downward.*

- (a) *Fore-downward.* Reverse of upward.

- (b) *Side-downward.* Reverse of upward.

- c. *Backward.*

- (a) From position of *attention* move the arms backward. Fig. A41.

- (b) From front horizontal move the arms backward to side horizontal or beyond. Fig. A42.

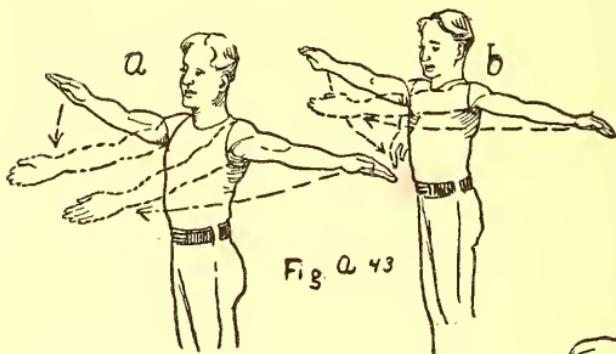


Fig. Q. 43

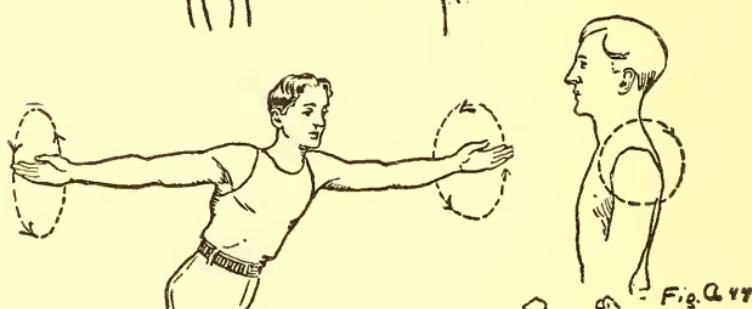


Fig. Q. 45

Fig. Q. 47

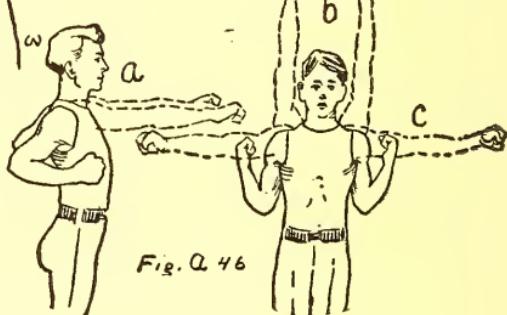


Fig. Q. 46

*d. Front.* From side horizontal to front horizontal or beyond to a cross position. Fig. A43 (*a* and *b*).

(5) *Shoulder Rotation.* Rotary movement of the scapulæ, arms may be in any position. Fig. A44.

(6) *Arm Circumduction* (arm circles). From the shoulder as a center, about either axis, describing circles of any diameter indicated. Fig. A45.

(7) *Thrust.* From a position in which the forearms are flexed, the arms are extended; the hands moving in a straight line in the direction indicated. Fig. A46.

#### 4. OF LOWER EXTREMITIES.

(1) *Charge.* Movement to position described in III, 1 (8) page 9. The foot is raised but slightly from the floor, the bending at thigh and knee being continuous from the start, so that thigh and leg are almost in final position when foot strikes the floor. Trunk is kept erect throughout. Fig. A10.

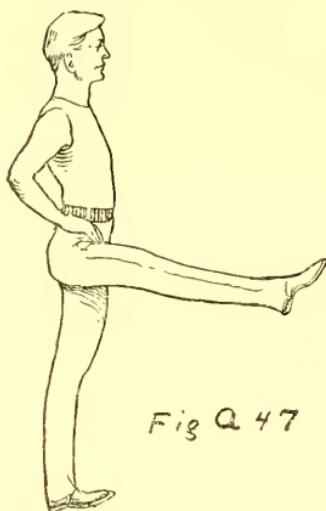


Fig. A 47

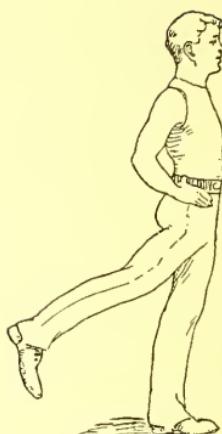


Fig. A 48

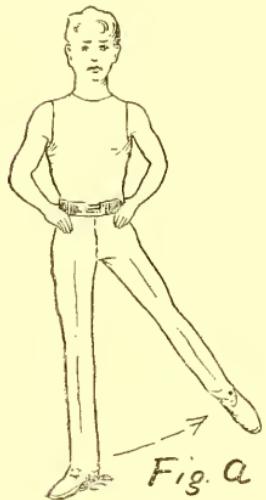


Fig. A 49

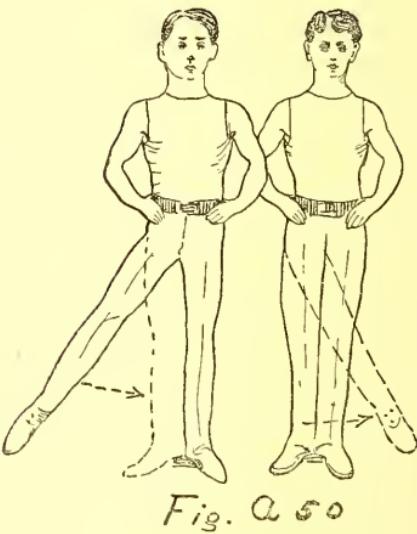


Fig. A 50

(2) *Lunge.* Movement to position as described III, 1 (9). Fig. A11, page 9.

(3) *Knee Bend.* Movement to position as described in III, 1 (12). Fig. A17, page 12.

(4) *Thigh Flexion.* Raise thigh forward, leg and foot extended. Fig. A47.

(5) *Thigh Extension.* Thigh extended backward as far as possible, leg and foot extended. Fig. A48.

(6) *Thigh Abduction.* Moving the thigh from the median line to its own side. To be done without altering position of pelvis. Fig. A49.

(7) *Thigh Adduction.* Moving the thigh from an abducted position toward the median line, also across the median line from its own side. Fig. A50.

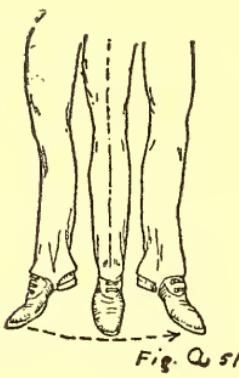


Fig. Q.51

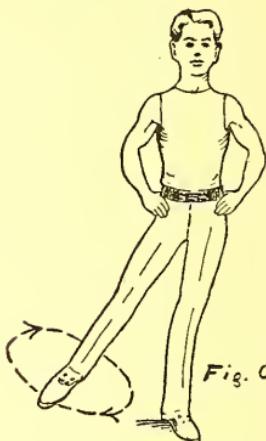


Fig. Q.52

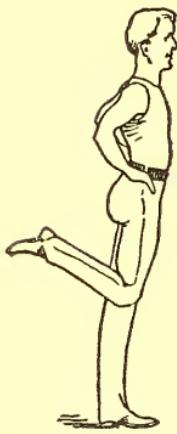


Fig. Q.53

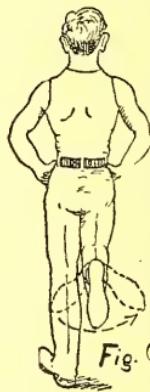


Fig. Q.54

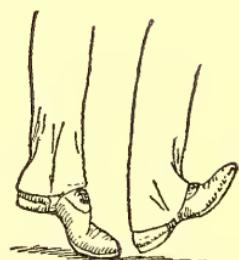


Fig. Q.55

Fig. Q.56

(8) *Thigh Rotation.* About the femur as an axis. Fig. A51.

(9) *Thigh Circumduction* (leg circles). A circumduction of thigh from the hip as a center. May be started from flexed, abducted or extended positions. Direction right or left, as for body circles. Fig. A52.

(10) *Leg Flexion.* Leg flexed upon the thigh which remains fixed. Fig. A53.

(11) *Leg Rotation.* About its own axis. Possible only when the leg is flexed. Fig. A54.

(12) *Foot Extension.* Straightening foot into line with leg, or when feet are on the floor raising heels. Fig. A55.

(13) *Foot Flexion.* Reverse of foot extension. Fig. A56.

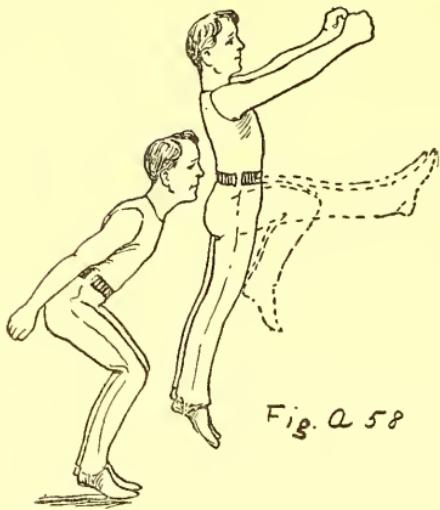


Fig. A 58

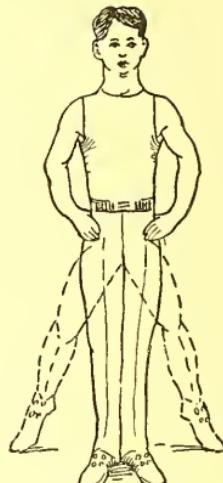


Fig. A 59

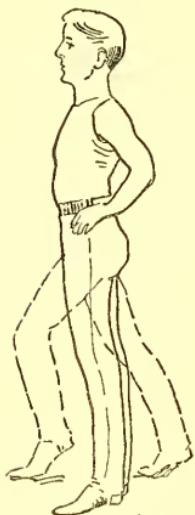


Fig. A 60

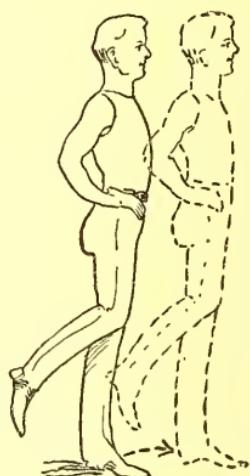
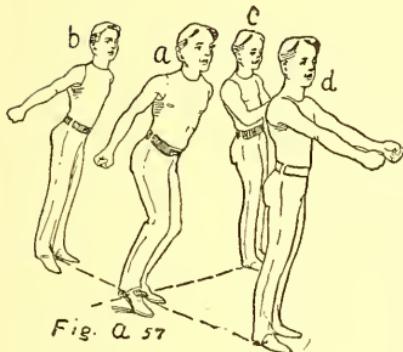


Fig. A 61

(14) *Jumps.* Springing from both feet:

a. *Broad.* Gaining ground in any direction indicated. Fig. A57 (a, b, c and d).



b. *Upward.* Springing straight up without gaining ground. May be accompanied with varied movements of limbs, turns, etc. Fig. A58.

c. *Stride.* Spring to *Stride-Stand* and return to starting position, both thighs moving simultaneously. Fig. A59.

d. *Walk.* Spring to *Walk-Stand* and return to starting position, both thighs moving simultaneously, also continuous alternation of feet in *walk-stand*. Fig. A60.

(15) *Hop.* A spring starting from one foot and landing on the same foot.

*Broad and Upward* as for *jumps*. Fig. A61.

(16) *Runs.* Rapid alternation of movement of both limbs. One foot leaves floor before other is replaced.

*Stationary Run.* Running movement without gaining ground. May be with flexions of leg only, of thigh only, or of thigh and leg.

## V. COMMANDS.

Names have been given to positions.

Commands are given either to show how to arrive at a position or to indicate when an exercise is to be executed. There are two parts to each command, viz.:

I. Preparatory Command, indicating the movement and how it is to be executed.

II. Command of Execution, indicating the time when the movement is to be executed.

Commands for Calisthenics may be further divided into those where the work is to be done in "series," and those where the work is to be done by "commands."

(a) *In Series.* Where one command is sufficient for the execution of several movements with only a momentary pause between each movement.

The "Preparatory" command in movements done in "series" consists: (1) Of the anatomical name of the part to be moved; and (2) of the movement. Since this is continuous and done in the present time, the second part of the command should be in the form of the present participle. The command of "execution" should be a sharp, firm word, upon which emphasis can be placed as follows:

Arms flexing! Begin! or Start! Trunk forward lowering, Begin! or Start!

(b) *By Command.* Where each distinct movement is performed only on command of execution with a definite stop after each movement.

In movements done by "command" the preparatory command names the anatomical part to be moved and the command of execution tells how to move it. Since this is only one movement the command of execution takes the form of the verb, as follows:

Arms—Flex! Trunk forward—Lower!

In view of the fact that few men are familiar with anatomical terms, it is frequently desirable to use, for commands, common terms such as most men are familiar with, as

*By Command.*

1 Head forward, sideward or backward—Lower!—Raise!

2 Trunk forward, sideward or backward—Lower!—Raise!

3 Arms fore or side-upward (to vertical)—Raise!—Lower!

4 Arms forward or sideward (to horizontal)—Raise!—Lower!

5 Arms backward—Raise!—Lower!

6 Leg forward (thigh flexion), sideward (thigh abduction) or backward (thigh extension), left or right—Raise!—Lower!

7 Knee forward (thigh and leg flexion)—  
Raise!—Lower!

8 Heels backward (leg flexion)—Raise!—  
Lower!

9 On toes—Rise!—Sink!

10 On heels—Rise!—Sink!

11 Head or Trunk, left or right—Turn!—  
Re-turn!

12 Foot forward, backward, sideward or left  
and right—Place!—Replace!

13 Left foot, charge or lunge forward, side-  
ward or backward—Charge or Lunge!—Return!

14 Knees—Bend!—Straighten.

*In Series.*

1 Arms fore or side-upward raising (to ver-  
tical)—Begin! or Start!

2 Arms forward or sideward raising (to front  
or side horizontal).

3 Arms backward raising.

To bring the exercises to a close the command  
is Hold! or Halt!

NOTE.—For the arm-sideward-movement, when only one arm is  
moved, the following commands may be used:

Left arm left raising. Left arm left-upward rais-  
ing. Left arm right raising, etc.

4 Arms obliquely forward or sideward raising.

5 Arms obliquely fore or side-upward raising.

No difficulty ought to be experienced in making out commands for movements not mentioned in this section.

The commands Position or Place! may be used as commands of execution for assuming positions previously described in the preparatory command as, Stoop stand—Position! Stride stand, hands on hips—Position! Hands on hips—Place!

The command “attention” always brings one to the positions thus described on page 5.

In general, to get back to the fundamental position after a command has been executed, the second command should be the opposite of the first command, as

Raise!—Lower! Bend!—Straighten!

Place!—Re-place! Turn!—Re-turn! Rise—Sink!

When the movement is to be repeated a number of times by “command,” it is not necessary to repeat the preparatory command. The movements may be continued by using the commands Raise!—Lower! etc.. or One! Two! being careful that the movements do not become so regular as is done in “series.”

It is possible with practice to proceed from one group of movements to another without stopping by giving a caution just before the finishing of the previous groups. Thus, when finishing the movement of arms—forward—raising, the leader may simply caution—sideward rising, and the class proceeds, without any stop, to execute the sideward raising.



## B. EXERCISES ON APPARATUS

*Definition.* Apparatus here refers to all gymnastic appliances except movable hand apparatus. Exercise on the apparatus refers to exercises in which the apparatus is the fixed point about which the individual moves: this may be called heavy apparatus work, but not necessarily heavy gymnastics.

### I. GENERAL TERMS.

1. TERMS for the positions and movements of the limbs and body as described under Calisthenics remain the same, those given under this section being additional and with special reference to exercises on apparatus.
2. AXES. Each piece of apparatus is considered as having two axes: Long Axis, corresponding to the length of the apparatus; Short Axis, corresponding to a line at right angles to the long axis and parallel to the floor. (See figure G appendix.)

3. PARTS OF APPARATUS. The location of parts of a piece of apparatus, except when given peculiar names, is with reference to the individual standing beside the apparatus.

(1) The *near* side of the horizontal bar (high or low), side horse and side buck, is the side of the approach; the opposite side being called the *far* side.

(2) The end of the parallel bars, long horse and long buck, toward the approach is the *near* end, the other end is the *far* end.

(3) When using the parallel bars from the side, the nearer bar is the *near* bar, the other is the *far* bar, and these terms remain constant as applied from the starting position, whatever change in position may be made during the exercise.

(4) The parallel bars are also designated *right* and *left* in all cross positions, corresponding to the sides of the body, and are always designated with reference to the individual's position at the time, whatever the turn in the exercise.

(5) In a side position between the bars, the bar in front is called the *front* bar, the other the *back* bar, and these are always designated with reference to the position of the individual at the time.

(6) When the horse is placed for exercises from the side, the *near* side is the side of ap-

proach and the opposite is the *far* side. The raised handles are the pommels and are designated as *left* or *neck* pommel and *right* or *croup* pommel; the space between them is the *saddle*; the space between the left pommel and the left end is the *neck*; the space between the right pommel and the right end is the *croup*. When the horse is used lengthwise, the sides from the approach are designated *right* and *left*. The *near* end is the *croup* and the *far* end is the *neck*.

(7) The parts of a ladder are rails (the long pieces) and the rounds. The naming of the rails is as for the parallel bars.

## II. POSITIONS.

1. GENERAL POSITIONS ON APPARATUS are determined with reference to the relation of the horizontal axis of the body to the long axis of the apparatus.

(1) *Side Positions.* With the horizontal axis of the body parallel to the long axis of the apparatus. (Fig. G, appendix.)

(2) *Cross Positions.* With the horizontal axis of the body at right angles to the long axis of the apparatus. (Fig. G, appendix.)

(3) *Front.* Denotes that the face or front of the body is toward the apparatus.

(4) *Back.* Denotes that the face or front of the body is turned from the apparatus.

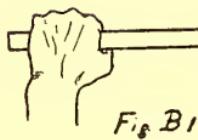


Fig. B1

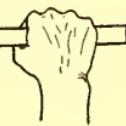


Fig. B2

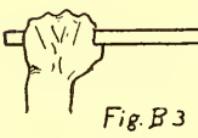


Fig. B3

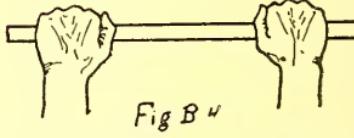


Fig. B4

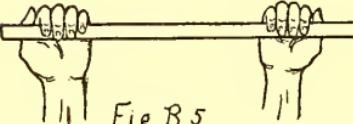


Fig. B5

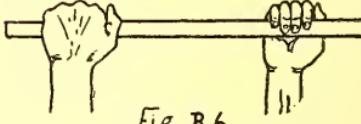


Fig. B6

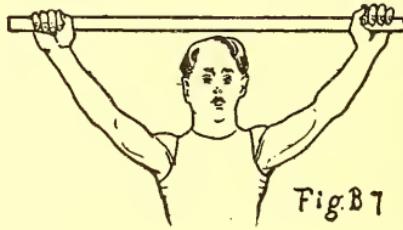


Fig. B7

(5) *Prone.* A position in which the body is lying full length on the apparatus face down.

(6) *Supine.* The opposite of prone.

## 2. GRASPS.

(1) *In Side Hang Position.* (See Hangs, pages 57-59.)

*a. Ordinary.* With the thumbs turned toward each other and grasping the bar on opposite side from the fingers (hands pronated). Fig. B1.

*b. Reverse.* The opposite of ordinary (hands supinated). Fig. B2.

*c. Combined.* With one hand in *ordinary*, the other in *reverse* grasp. Fig. B3.

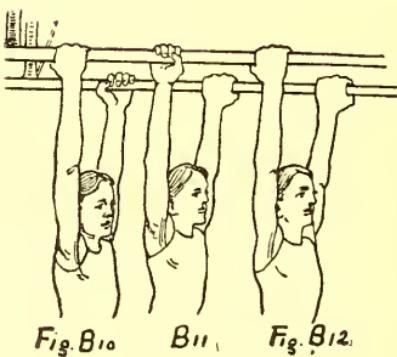
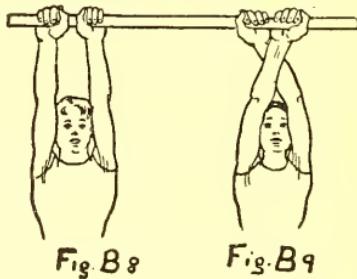
*d. Hook.* The same as *ordinary* grasp but with the thumbs grasping the bar on the same side as the fingers. Fig. B4.

*e. Reverse Hook.* The reverse of *ordinary hook* grasp. Fig. B5.

*f. Combined Hook.* With one hand in *ordinary hook* grasp, the other in *reverse hook* grasp. Fig. B6.

*g. Wide.* With the hands wide apart and may be with any of the above grasps. Fig. B7.

NOTE.—In all positions on apparatus where the contrary is not indicated, or is not required by the character of the position, the body should be as upright as possible, the thighs, legs and feet extended and together.



*h. Close.* With the hands together and may be with *ordinary, hook, combined*, etc., grasp. Fig. B8.

*i. Cross.* With the hands crossed and may be with *ordinary, hook, combined*, etc., grasp. Fig. B9.

(2) *In Cross Hang Position.* (See Hangs, page 63.)

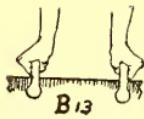
*a. Ordinary.* With palms turned toward each other. Fig. B10.

*b. Reverse.* With palms turned outward. Fig. B11.

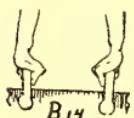
*c. Combined.* With one hand in *reverse*, the other *ordinary* grasp. Fig. B12.

(3) *In Rest Position.* (See Rests, pages 51-57.)

*a. Front and Back Rest.*

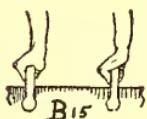
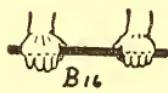
(a) *On Side Horse.*

(1) *Ordinary.* With palms turned toward each other. Fig. B13.



(2) *Reverse.* The opposite of ordinary grasp. Fig. B14.

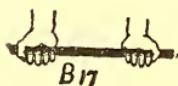
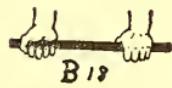
(3) *Combined.* With one hand in reverse and one in ordinary grasp. Fig. B15.

(b) *On Horizontal Bar.*

(1) *Ordinary.* The same as for ordinary grasp in the side hang position. Fig. B16.

(2) *Reverse.* The opposite of ordinary grasp in the side hang position. Fig. B17.

(3) *Combined.* The same as for combined grasp in the side hang position. Fig. B18.

(c) *On Parallel Bars.*

(1) *Cross position.* Grasp same as for side horse.

(2) *Side position.* Grasp same as for horizontal bar.

NOTE.—Figs. B13-B18 show a front view.

3. SEATS. Positions in which the weight of the body is supported mainly or altogether by the thighs or buttocks, with or without the hands grasping.

(1) *Cross Riding.* A cross position, astride the apparatus, weight resting on the inner sides of the thighs. On the parallel bars this seat may be across either or both bars, but is always understood as on both if not otherwise indicated. Fig. B19 (a, b and c).

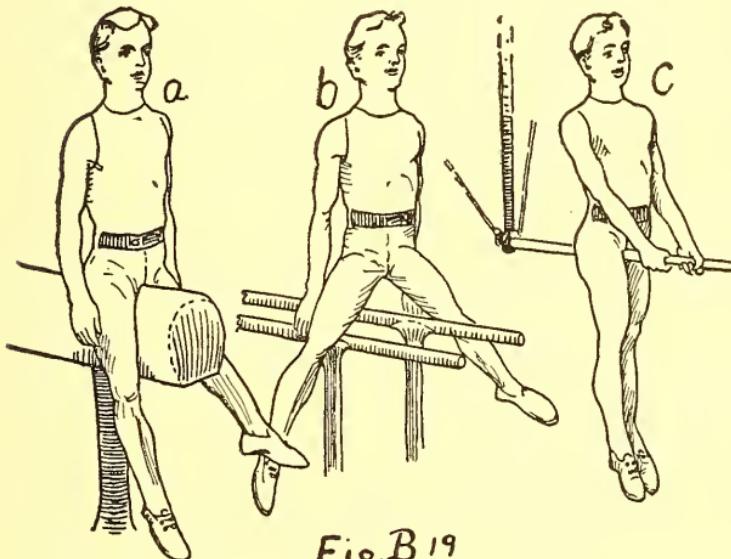
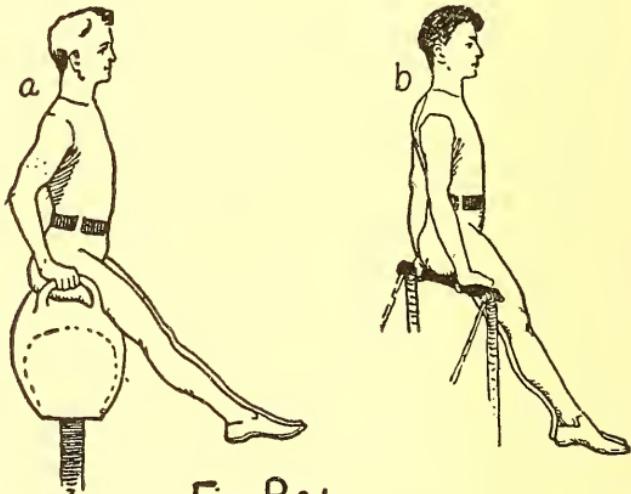
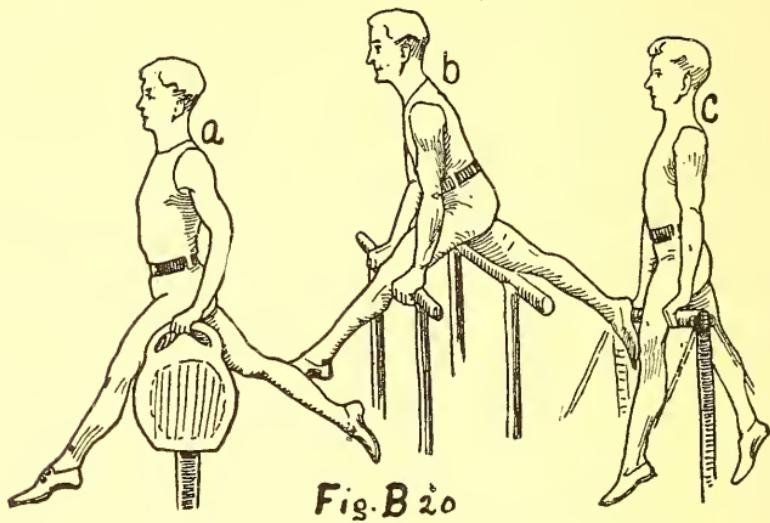


Fig. B19



(2) *Side Riding.* A side position, astride the apparatus, weight supported on the front of one thigh and the back of the other. On the parallel bars, unless otherwise indicated, this seat is on both bars. Fig. B20 (*a*, *b* and *c*).

*a. Left Side Riding Seat.* When the left thigh is forward.

*b. Right Side Riding Seat.* When the right thigh is forward.

(3) *Side.* A side position, both thighs on the same side of the apparatus and slightly flexed, weight supported by back of thighs and both buttocks. Fig. B21 (*a* and *b*).

(4) *Cross.* A cross position, both thighs on the same side of the apparatus and slightly flexed, weight supported on one thigh and both buttocks.

This seat may be assumed also by flexing the supporting thigh and leg, the other thigh and leg extended.

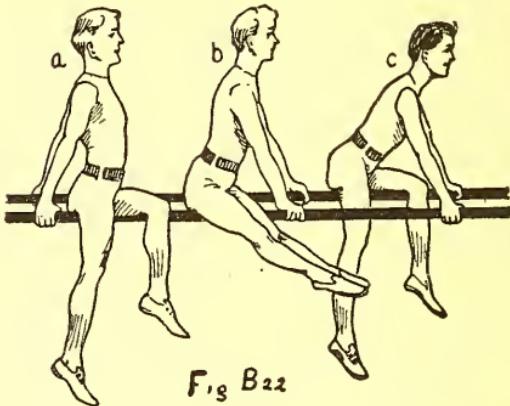


Fig. B 22

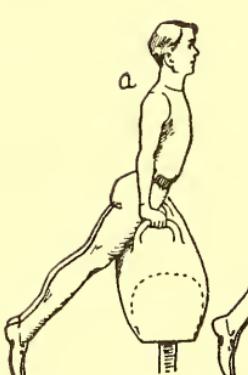


Fig. B 23

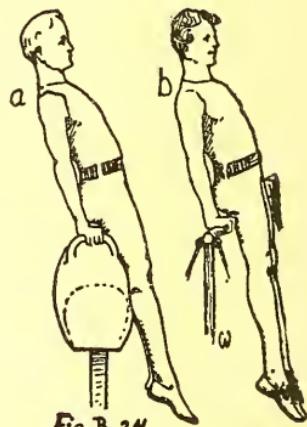


Fig. B 24

*On Parallel Bars.*

- (1) *Outside.* Both thighs to the outside of one bar. Fig. B22 (*a* and *b*).
- (2) *Inside.* Both thighs to the inside of one bar, i. e., between the bars. Fig. B22 (*c*).

4. RESTS. Positions in which the weight is supported wholly or mainly by the hands, the elbows above the point of support, the center of gravity below the shoulders.

- (1) *Front.* A side position arms straight, body supported by hands and front of thighs, face toward apparatus. Fig. B23 (*a* and *b*).
- (2) *Back.* As in front rest, but with back of thighs supporting and face away from apparatus. Fig. B24 (*a* and *b*).

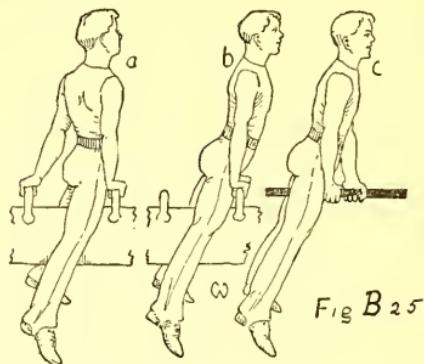


Fig B 25

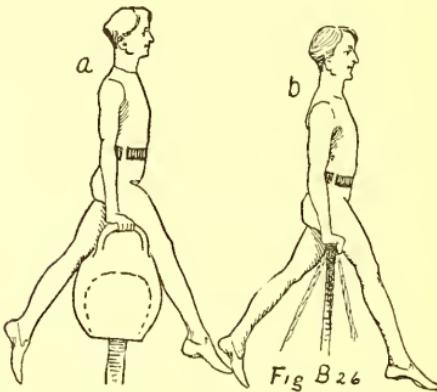


Fig B 26

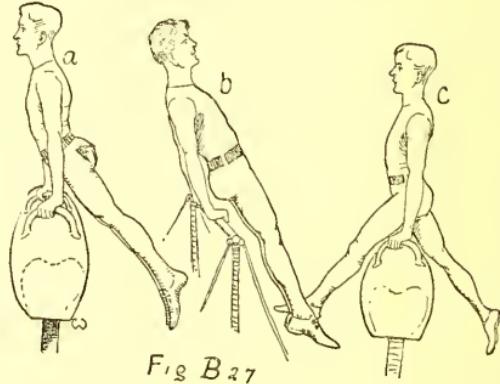


Fig B 27

(3) *Riding.* May be side or cross position as indicated, with the legs astride the apparatus, thighs touching but not supporting, as:

a. *Cross Riding Rest.* Fig. B25 (a, b and c).

b. *Side Riding Rest.* Fig. B26 (a and b).

(4) *Free.* Either of the preceding, with the thighs not touching the apparatus. A free, front or back rest can be held only momentarily. Fig. B27 (a, b and c.)

(5) *Horizontal Free.* A free front or cross rest in which the body is held momentarily in a horizontal position. Fig. B28.

(6) *Cross.* A cross position used only on the parallel bars, one hand on each bar. Fig. B29.

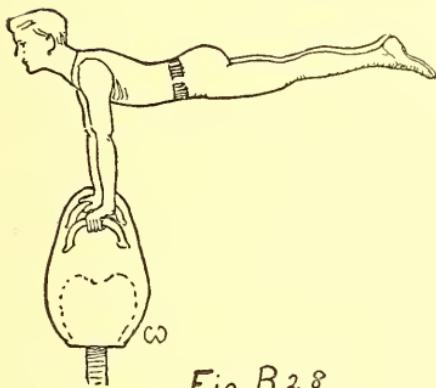


Fig. B28

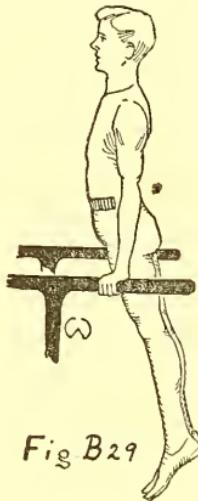


Fig. B29

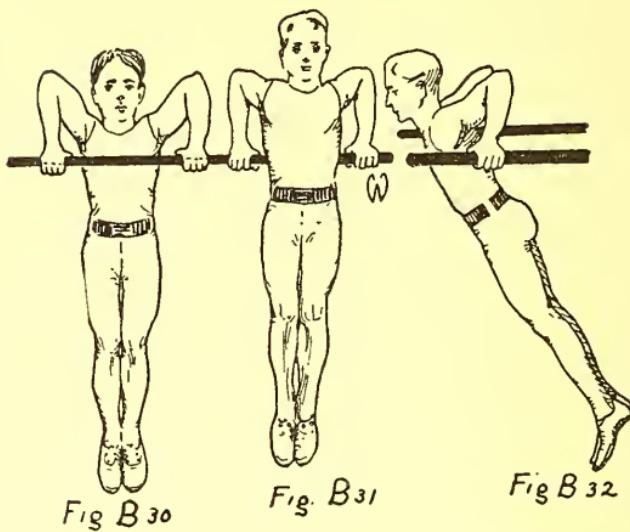


Fig. B 30

Fig. B 31

Fig. B 32

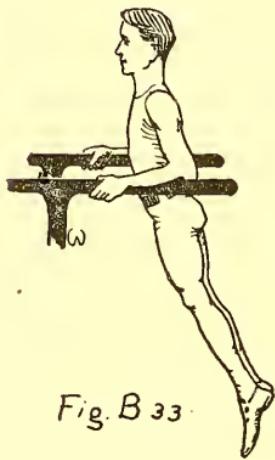


Fig. B 33

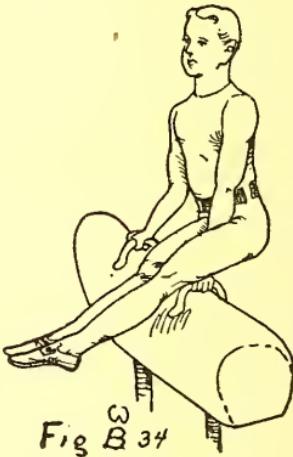


Fig. B 34

(7) *Bent Arm.* Any rest in which the arms are flexed to their fullest extent, as:

- a. *Front.* Fig. B30.
- b. *Back.* Fig. B31.
- c. *Cross.* Fig. B32.

(8) *Forearm.* A rest with the weight of the body supported on the forearms. Fig. B33.

(9) *Astride One Arm.* With the thighs flexed, one between, the other outside, the arms. Fig. B34.

(10) *Knee Bend.* A full knee bend position, hands grasping the apparatus. Fig. B35 (a, b and c).

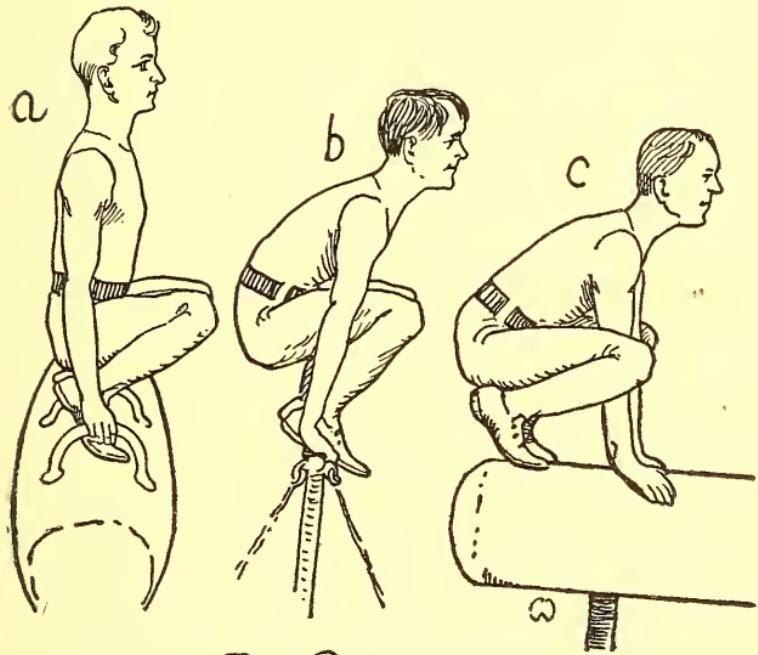


Fig. B35

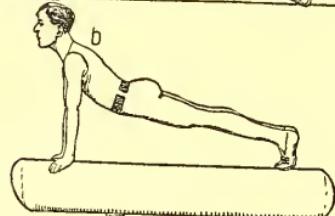
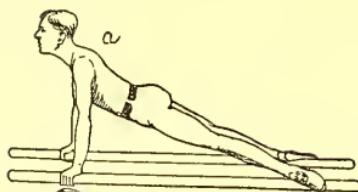


Fig B36

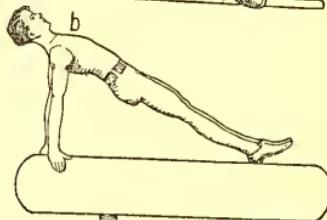
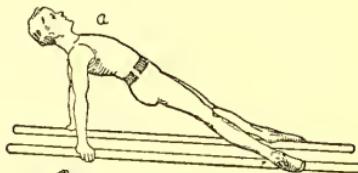


Fig B37

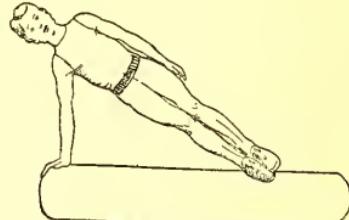
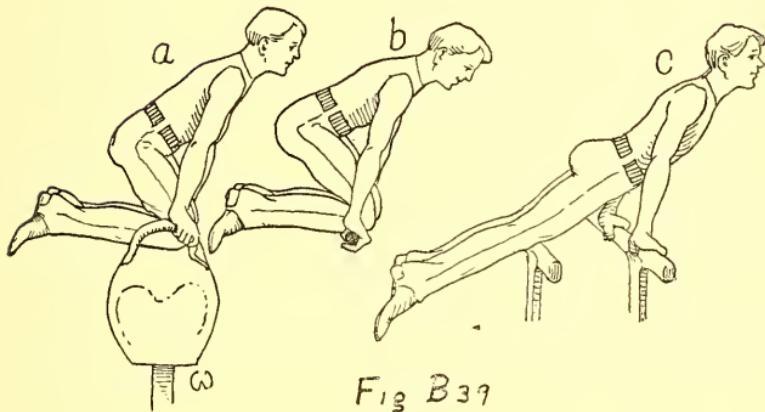


Fig B38

(11) *Leaning.* (See Calisthenics, page 11.) May be in either a cross or side position, as:

- a. *Front.* Fig. B36 (a and b).
- b. *Back.* Fig. B37 (a and b).
- c. *Side.* Fig. B38.
- d. *Knee.* Fig. B39.



NOTE.—Rest, when without qualifications, means front rest on horse and horizontal bar; cross rest on parallel bars, except in side parallel bar exercises, when it means front rest.

5. **HANGS.** Positions dependent upon a flexion of a part of the supporting extremity and may be either a side or cross position, the center of gravity below the point of support.

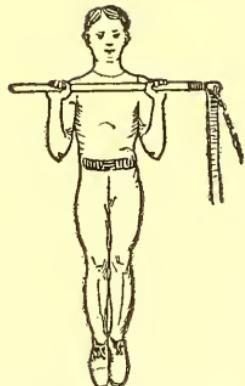


Fig. B 40

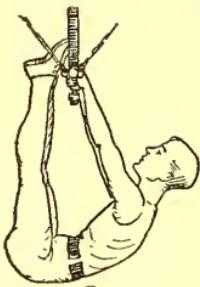


Fig. B 41

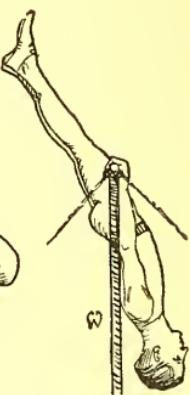


Fig. B 42

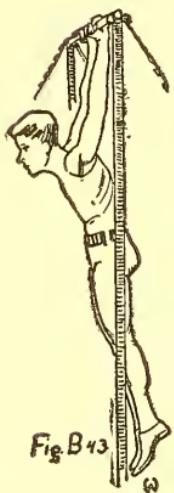
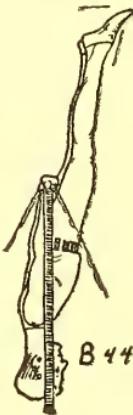


Fig. B 43



B 44

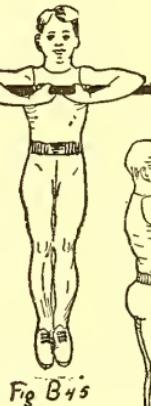


Fig. B 45

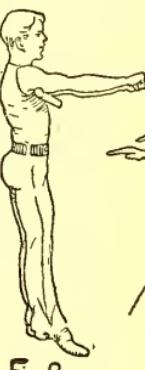


Fig. B 46

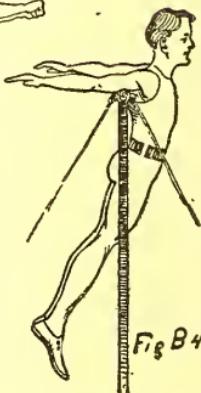


Fig. B 47

(1) *Side.* A hang in side position with the grasp as indicated. See Figs. B7, B8 and B9, pages 42 and 44.

*a. Ordinary.* With the ordinary grasp, arms straight and not crossed. Fig. B85-a.

*b. Cross Arm.* Same as ordinary, but with the arms crossed. See Fig. B9, page 44.

*c. Bent Arm.* Any hang with the arms flexed. Fig. B40.

*d. Front.* A hang reached by flexing the thighs, feet to the bar. Fig. B41.

*e. Front with Head Down.* The front hang with the body and lower limbs extended upward. Fig. B42.

*f. Back.* The hang reached by passing the lower limbs and body between the arms under the apparatus and turning over as far as possible. Fig. B43.

*g. Back with Head Down.* The back hang with the body and lower limbs extended upward. Fig. B44.

*h. Upper Arm.* With weight of the body supported by the upper arms, the hands may or may not be grasping. Figs. B45 and B46.

*(a) Front.* With the arms extended forward. Fig. B46.

*(b) Back.* With the arms extended backward. Fig. B47.

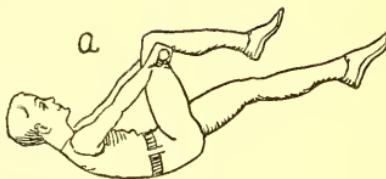
*i. Elbow.* With the weight of the body supported by the elbows and may be either:



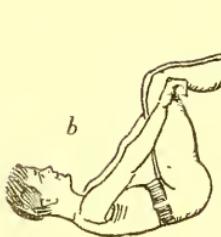
Fig. B48



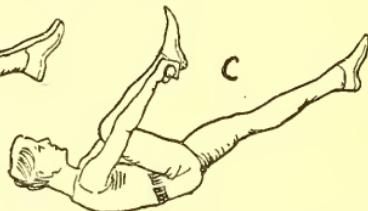
Fig. B49



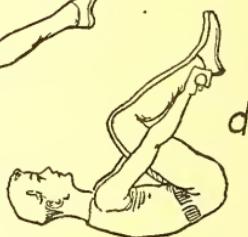
a



b



c



d

Fig. B50

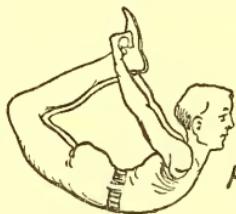


Fig. B51

(a) *Front Elbow Hang.* Body facing the apparatus. Fig. B48.

(b) *Back Elbow Hang.* Body facing away from the apparatus. Fig. B49.

j. *Leaning.* With the weight of the body supported by one or both hands (elbows below the apparatus) and part of one or both lower limbs as, knee, toe and heel leaning hangs, and may be:

(a) *Front.* Front of body toward apparatus. Fig. B50 (a, b, c and d).

(b) *Back.* Back of body toward apparatus. Fig. B51.

k. *Hock.* From one or both knees without the aid of the hands. Fig. B52.

l. *Toe.* From the toes of one or both feet without the aid of the hands. Fig. B53.

m. *Heel.* From the heels of one or both feet without the aid of the hands. Fig. B54.



Fig. B52



Fig. B53



Fig. B54

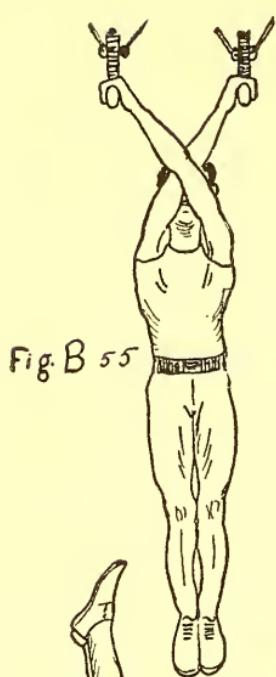


Fig. B 55

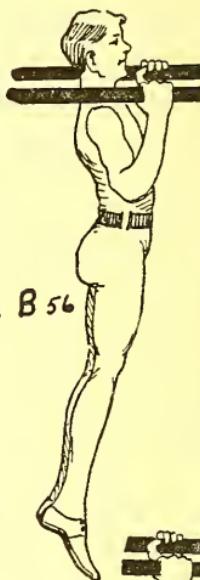


Fig. B 56

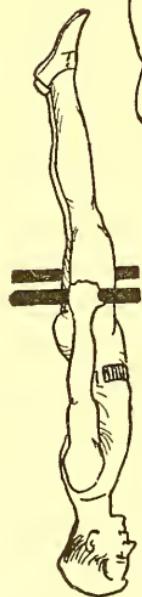


Fig. B 58

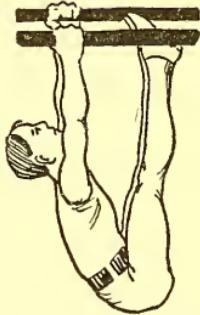


Fig. B 57

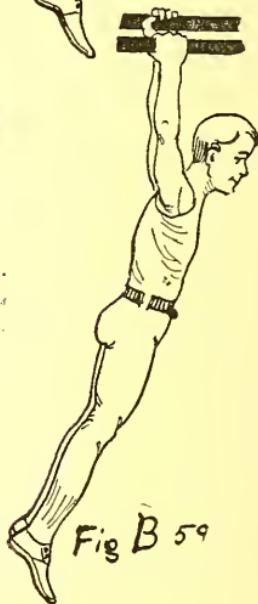


Fig. B 59

(2) *Cross.* A hang in cross position with the grasp as indicated. (See Grasps, pages 43-46.)

*a. Ordinary.* With the arms straight.

See Figs. B10, B11 and B12, page 44.

*b. Cross Arm.* With the arms crossed.

Fig. B55.

*c. Bent Arm.* With the arms flexed.

Fig. B56.

*d. Front.* With the thighs flexed and feet to the apparatus. Fig. B57.

*e. Front with Head Down.* With the body and lower limbs extended upward.

Fig. B58.

*f. Back.* Reached by passing the lower limbs and body between the arms and turning over as far as possible. Fig. B59.

*g. Upper Arm.* With the weight of the body supported by the upper arms; the hands may or may not be grasping.

*(a) Front.* Fig. B60.

*(b) Back.* Fig. B61.

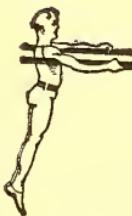


Fig. B60

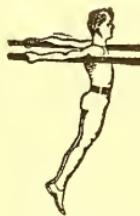


Fig. B61

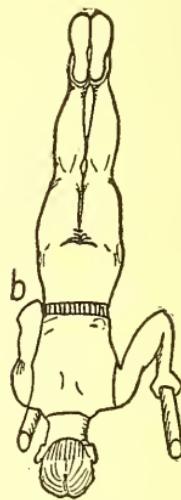
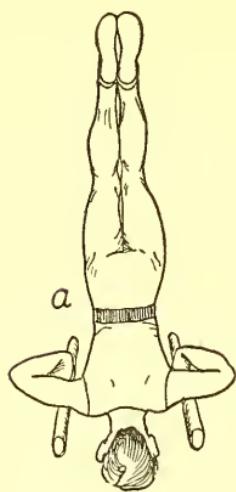


Fig. B64

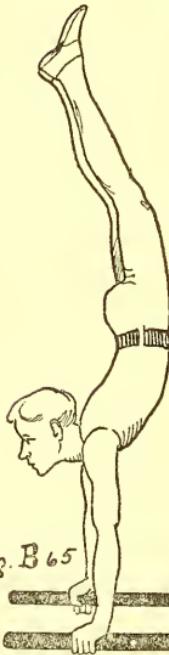


Fig. B65

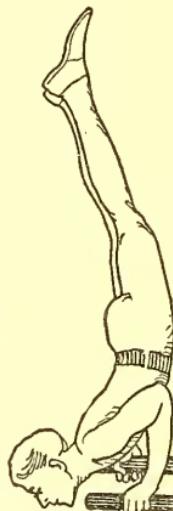


Fig. B66

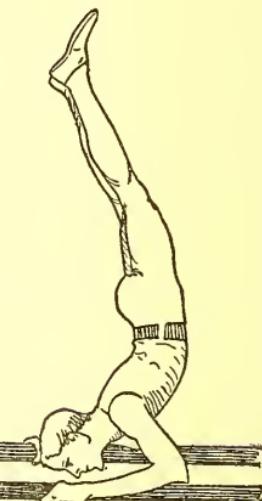
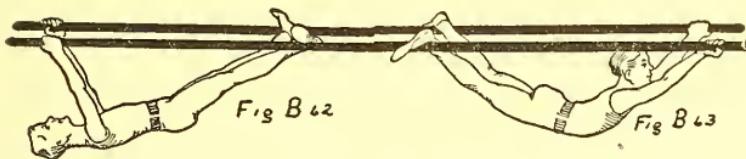


Fig. B67

*h. Leaning.* With the weight supported by one or both hands (elbows below the apparatus) and part of one or both lower limbs as knee, toe, or heel leaning hangs and may be,



(a) *Front.* Fig. B62.

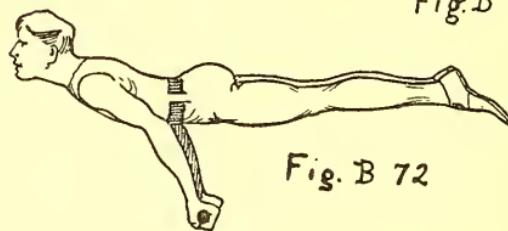
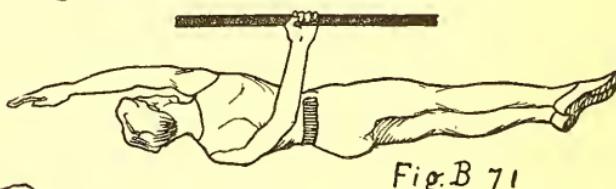
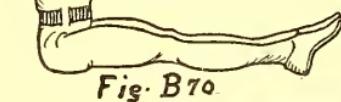
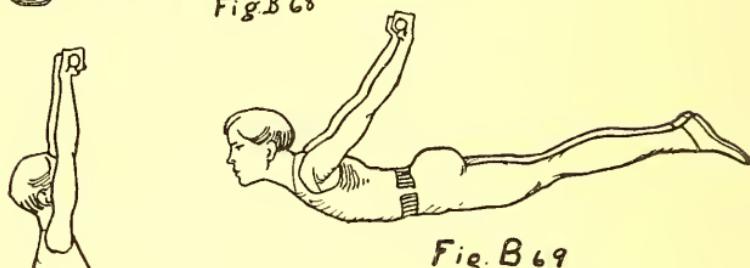
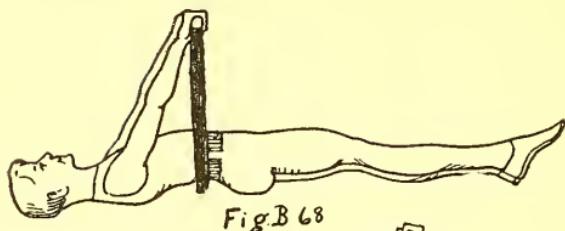
(b) *Back.* Fig. B63.

## 6. MISCELLANEOUS POSITIONS.

(1) *Shoulder Balance.* With the body and lower limbs extended upward, the weight of the body supported on one or both shoulders, the balance maintained by the hands. *Shoulder balance* on one shoulder is always so indicated. Fig. B64 (*a* and *b*).

(2) *Hand Balance.* Same as *shoulder balance*, except that weight of the body is supported on one or both hands, arms bent or straight. The *bent arm* and the *one hand* balance are always so indicated. Figs. B65, B66.

(3) *Forearm Balance.* Same as *shoulder balance*, except that the weight of the body is supported on one or both forearms. *Forearm balance* on one arm is always so indicated. Fig. B67.



(4) *Lever.* With the body and lower limbs extended and held in a horizontal position, and, unless otherwise indicated, is a hang.

*a. Front.* With front of body toward the apparatus. Fig. B68.

*b. Back.* With back of body toward the apparatus. Fig. B69.

*c. Half.* With the thighs flexed, to right angles to the body, the latter being in any Hang or Rest. Fig. B70.

*d. Side.* With the side of the body toward the apparatus. *Side lever* on one arm, is with the supporting arm passing from lower shoulder across the back, as in Fig. B71 or in front of the body.

*e. Elbow.* A *front lever* above the apparatus, the trunk resting on one or both elbows as may be indicated and is not in a hang. Fig. B72.

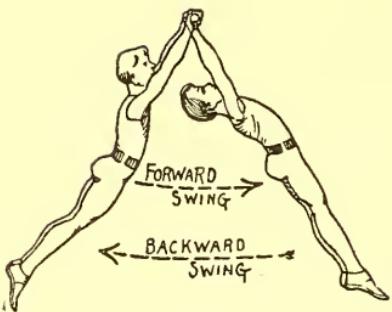


Fig. B 73

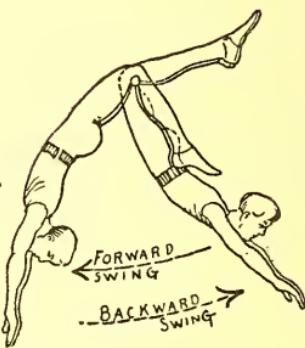


Fig. B 74

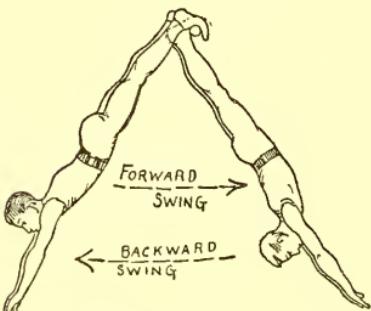


Fig. B 75

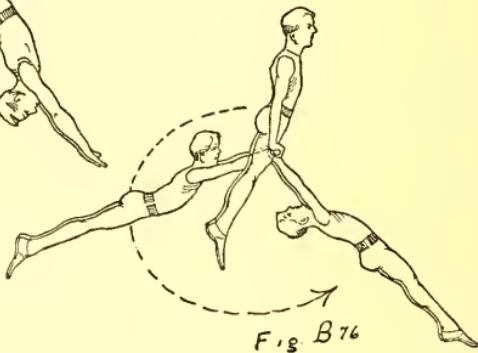


Fig. B 76

## III. MOVEMENTS.

1. SWINGS. These are movements in which the body describes an arc of a circle.

(1) *Forward* or *Front*. In the direction one is facing, straight ahead. Fig. B73.

(2) *Backward* or *Back*. The reverse of forward or front. Fig. B73.

(3) *Hock*. A swing in the hock hang. Fig. B74.

(4) *Toe*. A swing in the toe hang. Fig. B75.

(5) *Long Underswing*.

a. *On High Bar*, from *front rest* (or from any movement through the rest). The body is swung backward, letting the shoulders drop behind and below the bar, the individual swinging forward with straight arms. Fig. B76.

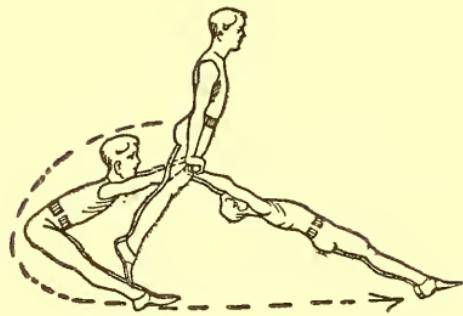


Fig. B 77

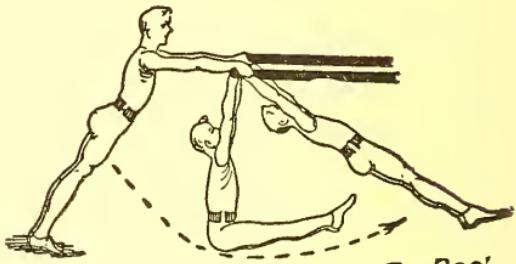


Fig. B 78'

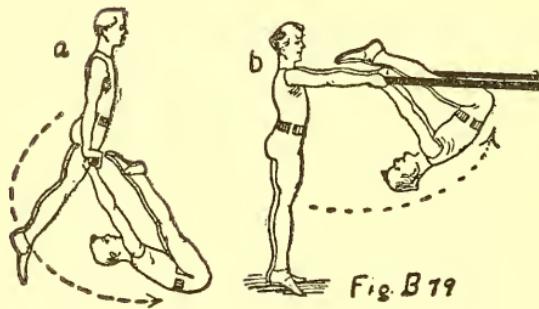


Fig. B 79

*b. On Low Bar* (from front rest or stand). The body is dropped as on the high bar, but the thighs are flexed so that the feet clear the floor as the body passes under the bar and are extended after it has passed under, so that they are in line with the vertical axis at the end of the front swing. Fig. B77.

*c. On the Parallel Bars.* From cross stand either at the end of or in the middle of bars or from a side stand at side of bars, or from cross rest, the movement is the same as on the *low bar*. Fig. B78.

(6) *Drop Swing.* (Drop back.) From front rest drop backward, arms straight, flexing thighs and raising feet to bar, coming to hang with feet to the bar. Maintain this position and continue to swing. This may also be done on low bar or parallel bars from rest or stand. Fig. B79 (*a* and *b*).

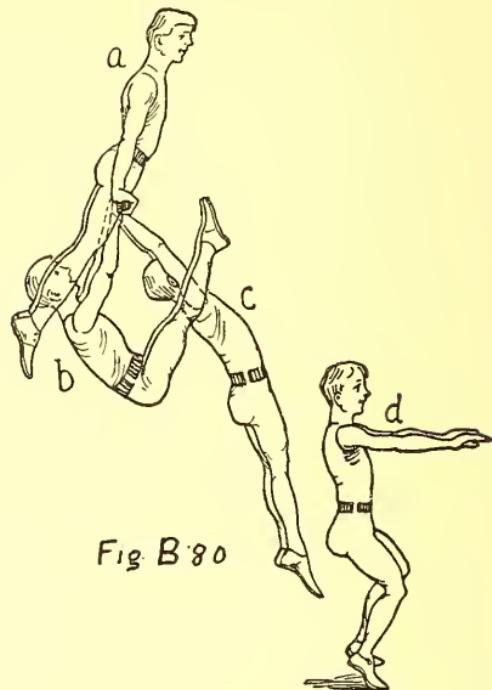


Fig. B 80

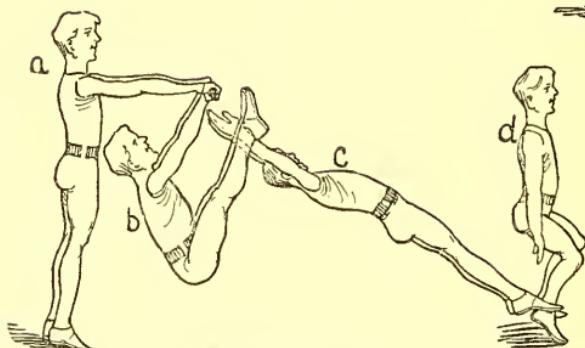


Fig. B 81

(7) *Short Underswing.*a. *On High Bar.*

(a) *To the floor.* From front rest or from any movement passing through the front rest, drop back as in the drop swing and as the feet tend to leave the bar, extend the thighs quickly, letting go of the bar when or before the thighs are fully extended. Fig. B80.

(b) And swing back. Proceed as before, but retain the grasp and swing back with the body straight and thighs extended.

b. *On Low Bar.*

(a) From *front rest*, as on high bar.

(b) *From stand.* By a jump to front rest, or free rest, or just enough to clear the floor, flexing thighs immediately and proceeding as from rest. Fig. B81.

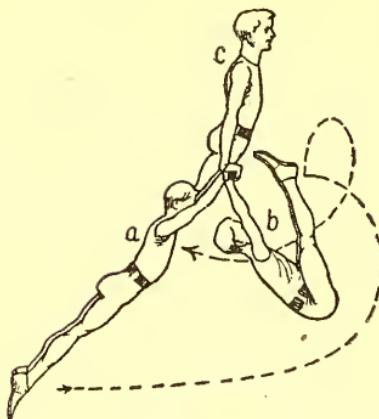


Fig. B 82

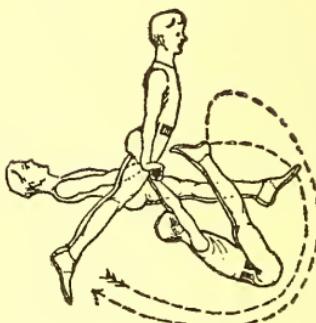


Fig. B 83

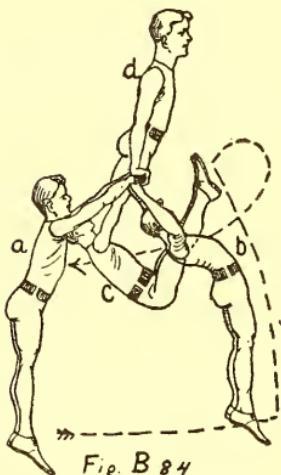


Fig. B 84

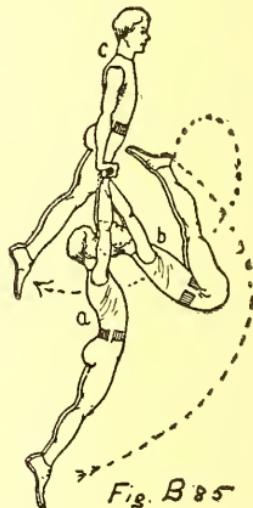


Fig. B 85

(8) *Upstart.* A rise to rest from the end of a front or back swing, usually involving a thigh flexion and extension as described below.

a. *On High Bar.*

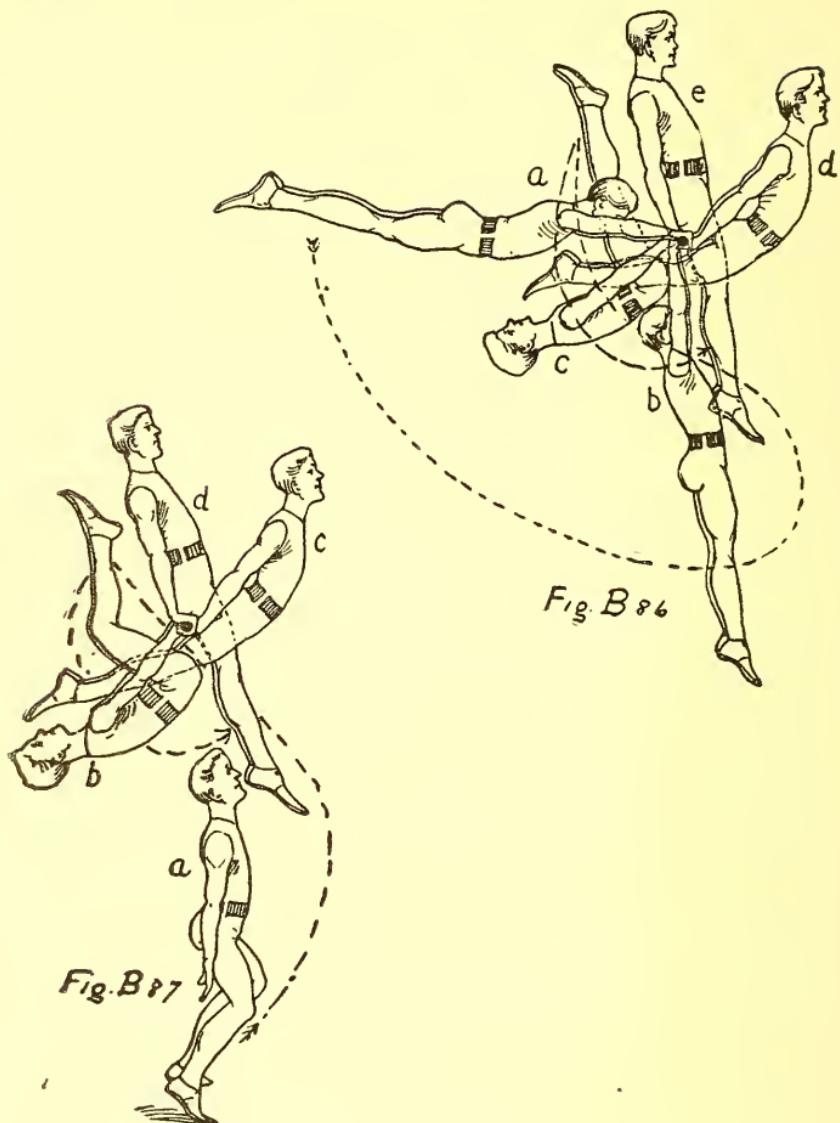
(a) *Front.*

(1) *Ordinary.* A rise to front rest from the end of a front swing by flexing the thighs (feet to the bar) and then extending them forcibly, arms straight. Fig. B82.

(2) *Drop.* An upstart from the *drop swing*, see III, 1, (6), page 71. Fig. B83.

(3) *Quick* (Chest heave). A rise to front rest from a jump or a hang by quickly arching the back, throwing chest forward and immediately following with a quick flexion and extension of the thighs without raising the feet to bar. Fig. B84.

(4) *Short.* Flex the thighs (feet to the bar) and rise to front rest by extending the thighs forcibly without a swing. Fig. B85.



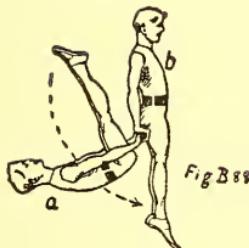
## (b) Back.

(1) *Ordinary.* A rise to back rest by flexing the thighs at the end of the front swing and passing them between the arms and under the bar, swinging backward in the back hang with head down and forcibly extending thighs near the end of the forward swing, rising to back rest, Fig. B86.

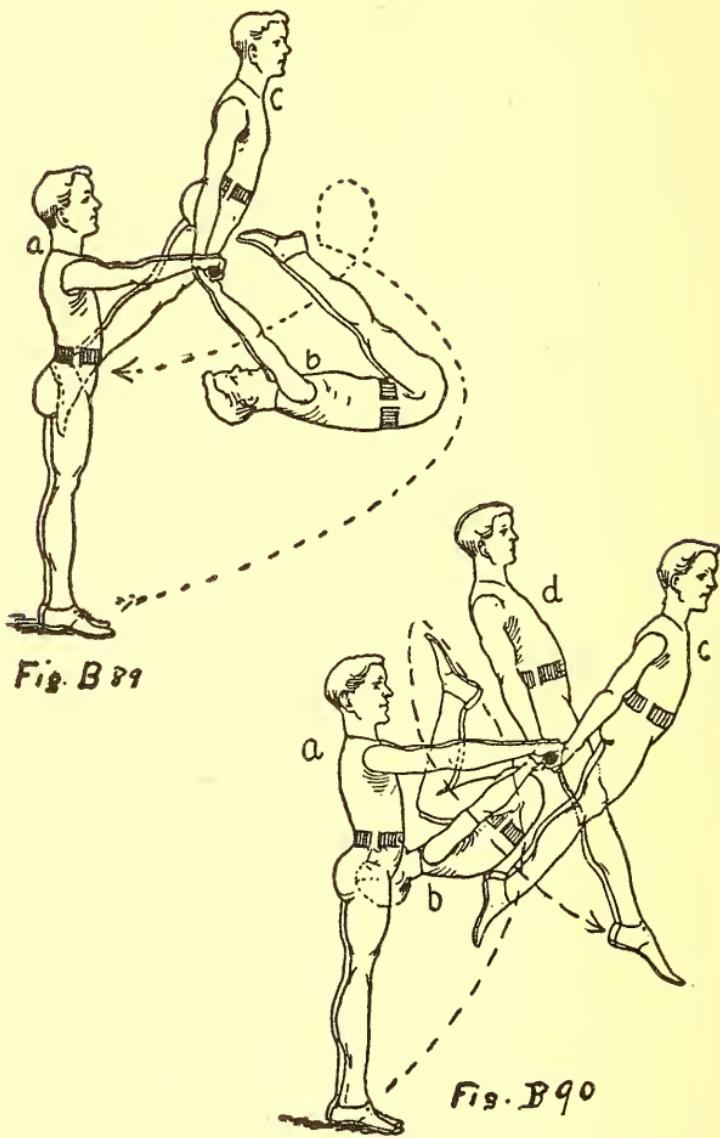
May also be executed by flexing the thighs and passing legs between the arms at the end of the back swing and rising to back rest on the next forward swing.

(2) *Quick.* A rise to back rest from a jump and without a preliminary swing. Fig. B87.

(3) *Still.* From the position of back hang with head down and thighs flexed and coming to back rest without a swing. Fig. B88.



NOTE.—The Back Upstart may also be executed from a heel leaning hang or from a swing in the back hang with the head down and thighs flexed.



*b. On Low Bar.**(a) Front.*

(1) *Ordinary.* A rise to front rest from a stand by flexing the thighs, bringing the feet to the bar, swinging forward in this position and extending the thighs forcibly on the back swing. Fig. B89. This upstart may also be done at the end of a long underswing.

(2) *Drop.* Same as on the high bar, page 75.

*(b) Back.*

(1) *Ordinary.* Same as on the high bar but preceded by a long underswing, page 77.

(2) *Quick.* From a stand flexing thighs quickly bringing feet between the arms and below the bar and proceeding as on the high bar. Fig. B90.

(3) *Still.* Same as on high bars, page 77.

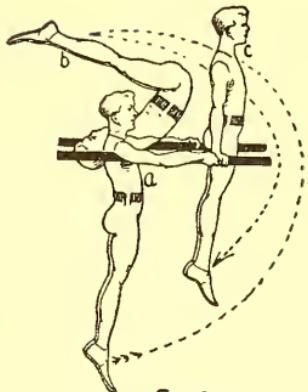


Fig. B 91

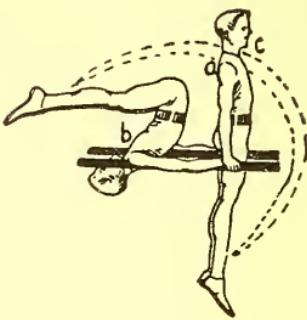


Fig. B 92

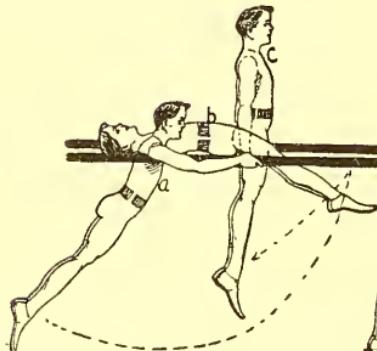


Fig. B 93

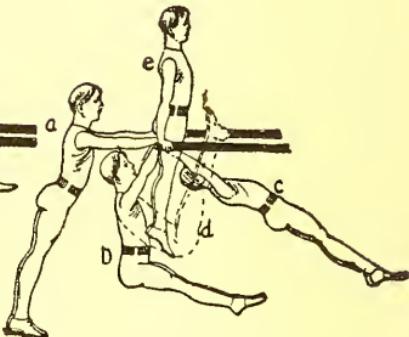


Fig. B 94

*c. On Parallel Bars.*

(1) *Ordinary.* Unless otherwise indicated is a rise to cross rest by flexing and extending thighs at the end of the front swing in the upper arm hang. Fig. B91.

(2) *Drop.* An upstart from the *drop back*, at the end of front swing to upper arm hang with thighs flexed and hips above bars. Fig. B92. (See *Drop Back*, page 71.)

(3) *Drop Between the Bars.* Action same as for drop upstart on the horizontal bar. (Page 75.)

(4) *Quick.* A rise to cross rest at end of front swing in upper arm hang, without flexing thighs. Fig. B93.

(5) *Between the Bars.* A rise to cross rest at the end of short or long underswing as described for the low bar. Fig. B94.

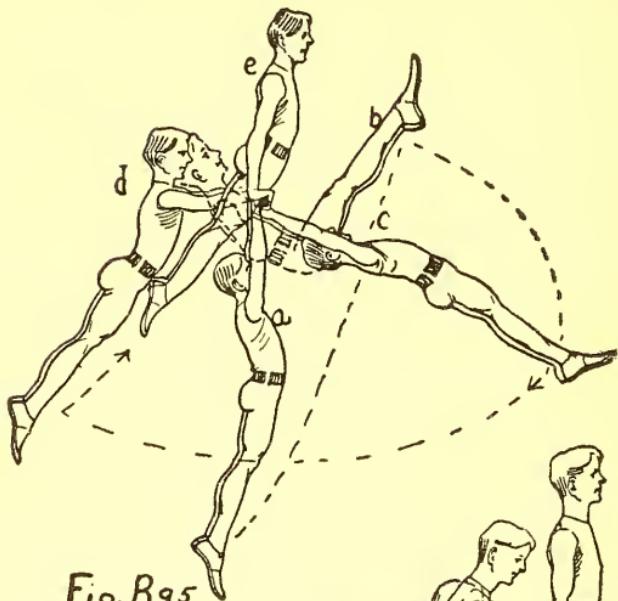


Fig. B95

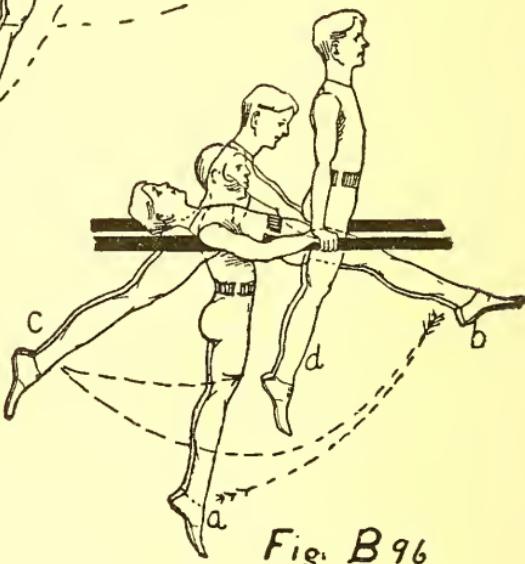


Fig. B96

(9) *Uprise.* A direct rise to rest from the end of a back swing; usually not involving a thigh flexion and extension.

a. *On High Bar.* A rise to front rest at the end of the back swing. Fig. B95.

b. *On Parallel Bars.* A rise to cross rest at end of a back swing in the upper arm hand. Fig. B96.

c. *On Flying Rings.* Same as on the high bar and may be executed at the end of both the front and the back swing of the rings.

(10) *Drop Back.* On the parallel bars, a movement from rest, drop back to upper arm hang at end of back swing. Fig. B97. When done with front swing the thighs are flexed as far as possible. Fig. B98.

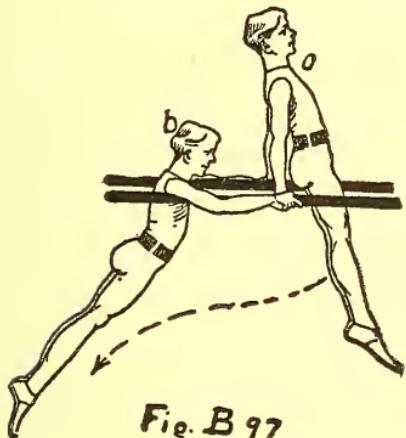


Fig. B97

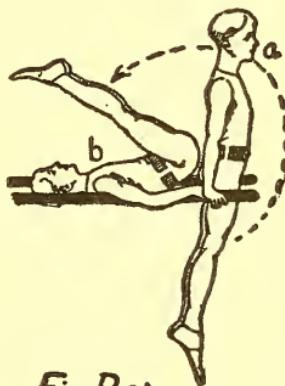


Fig. B98

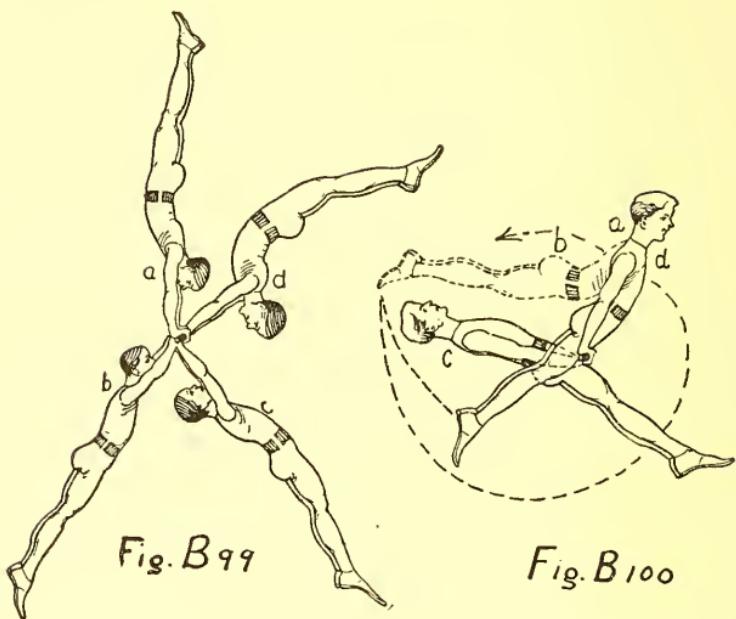
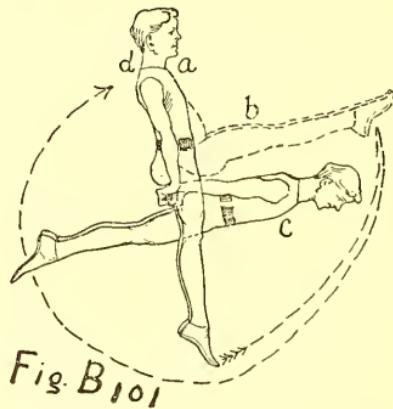


Fig. B99

Fig. B100



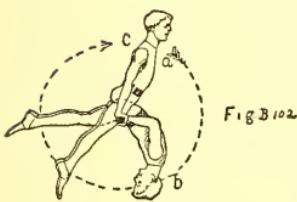
## 2. CIRCLES.

(1) *Of the body.*a. *Giant.*

(a) *Full.* Circles about the horizontal bar at arm's length from it. Fig. B99.

(b) *Half.* Same as the full except that the arms are flexed, but only when above the bar.

b. *Small.* Made in the rest positions without arms flexed. May also be executed by springing from the floor and coming to a front or cross rest position or to the floor, at the end of the circle. The front or back of thighs are kept close to the bar.



(a) *Back.* Executed from front rest or from the floor. Fig. B100.

(b) *Front.* Executed from back or front rest to back or front rest. Figs. B101, B102.

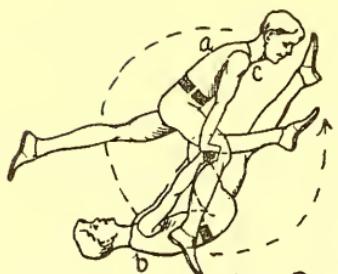


Fig. B103

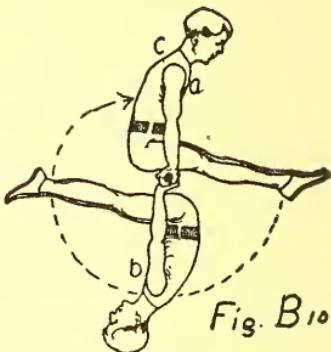


Fig. B104



Fig. B105

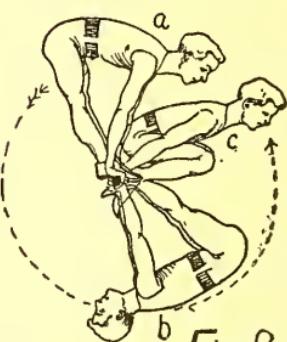


Fig. B106

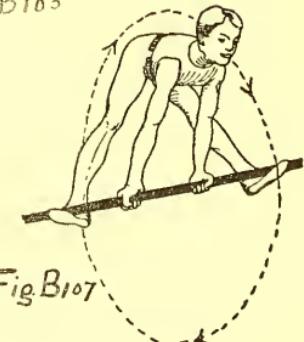


Fig. B107

c. *Free.* Executed without touching the apparatus with the body.

d. *Knee.* Made with the grasp of one or both knees and one or both hands. Fig. B103.

e. *Seat.* Made in any seat with or without thigh flexion, hands grasping. Fig. B104.

f. *Hock.* Made with the grasp of one or both knees, without the aid of the hands. Fig. B105.

g. *Foot, Heel or Toe.* Made with the aid of one or both hands and with one or both feet, heels or toes of one or both feet against the bar. Figs. B106, B107.

h. *Upper Arm.* Executed with the weight supported on the upper arm, fore-arms flexed, hands may or may not be grasping. Fig. B108.

i. *Forearm.* Executed from the forearm-rest position, flexing thighs and legs, grasping back of thighs near the knees with the hands. Fig. B109.



Fig. B108



Fig. B109

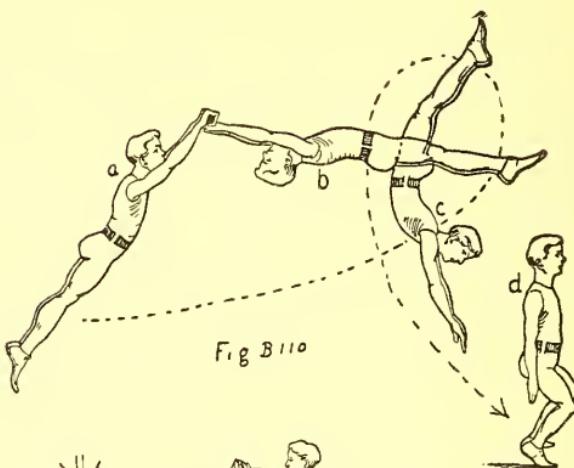


Fig B III a

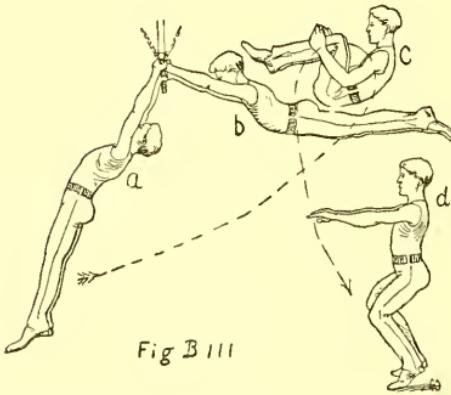


Fig B III b

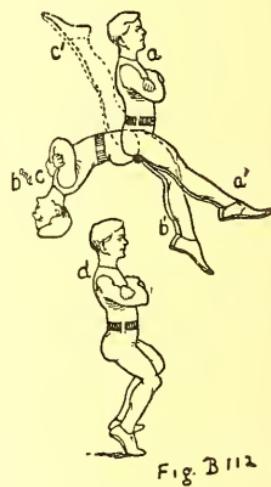


Fig B III c

*j. Fly Away.* A somersault at the end of a swing at arm's length.

(a) *Front.* A back somersault executed at the end of the front swing. Fig. B110.

(b) *Back.* A front somersault executed at the end of the back swing. Fig. B111.

(c) *Quick.* A back somersault from hang without swing by quickly flexing thighs and legs or thighs only.

*k. Drop.* A movement from a rest, seat or hanging position, the performer alighting on his feet and may be:

(a) *Backward* from the *back rest* or side seat position, the individual arches his back and drops backward, head foremost, flexes the thighs sharply and alights on his feet. Hands may or may not be grasping. Fig. B112. A back somersault can be executed from the side seat.

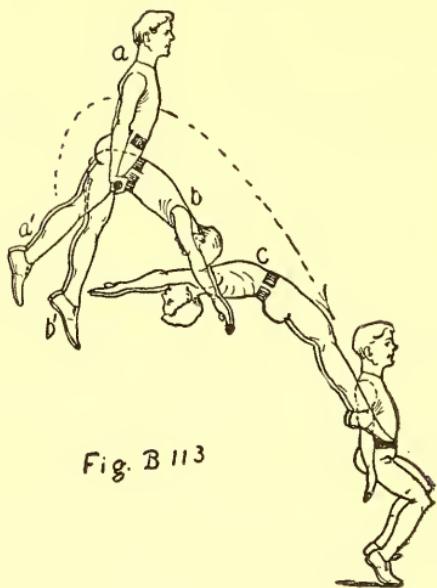


Fig. B 113

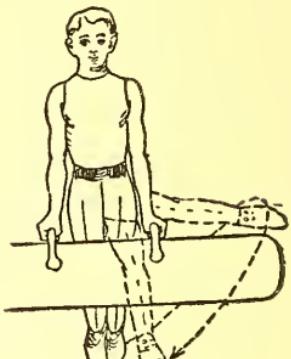


Fig. B 114

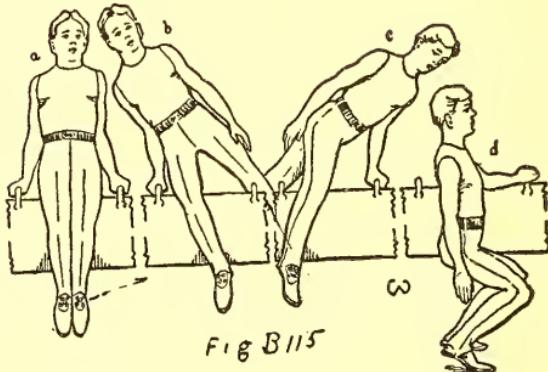


Fig. B 115

(b) *Forward*, from the *front rest* position the body is bent forward at the hips, the thighs then extended sharply, the individual alighting on his feet. Hands may or may not be grasping. Fig. B113.

(c) *Hock*. From a hock hang without a swing. Fig. B52, page 61.

(d) *Toe*. From a toe hang without a swing. Fig. B53, page 61.

(2) *Of the Legs*. Movements of the lower limbs as described under Calisthenics, IV. 4 (9), page 31.

a. *Half*. The leg or legs are carried from one side of the apparatus to the other. Fig. B114.

b. *Full*. One or both legs describe a complete circle. Fig. B115.

c. *Single*. One leg describes either a half or full circle.

NOTE.—These circles are named as to direction, from the clock placed at the left end of the bar and facing it. *Forward*, is in the direction in which the hands move; *backward*, in the reverse direction. Combinations, such as *knee and toe* circle, will suggest themselves.

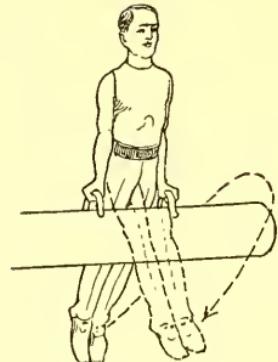


Fig B 116

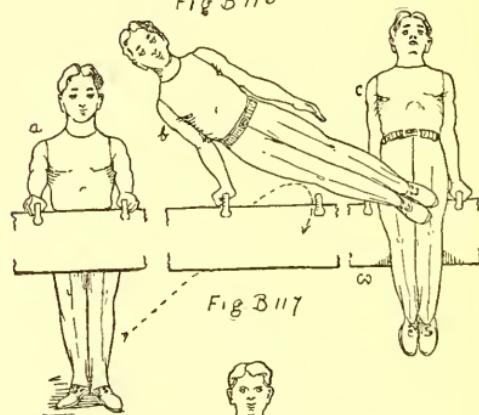


Fig B 117

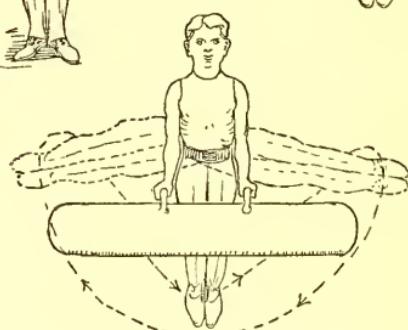


Fig B 118

*d. Double.* Both legs simultaneously describe either a half or full circle. Figs. B116, B117, B118.

NOTE.—For directions see thigh circumduction in Calisthenics, page 31, (9). Abbreviations for writing and naming these circles are as follows:—

R.  $\frac{1}{2}$  right—right leg,  $\frac{1}{2}$  circle to right;  
R.  $\frac{1}{2}$  left—right leg,  $\frac{1}{2}$  circle to left; double  $\frac{1}{2}$  right—both legs,  $\frac{1}{2}$  circle to right;  
R. right—right leg, full circle to right; R. left—right leg, full circle to left; double right—both legs, full circle to right. Circles for left leg, substitute L for R.

*e. Feint.* A movement similar to the  $\frac{1}{2}$  circle, the leg is circled about the arm of the same side, but instead of passing under the hand is immediately returned to its starting position. It is used as a preliminary to other movements and the leg is swung as nearly as possible in the lateral plane.

(a) *Right*, is with right leg; *left*, is with the left leg. When not otherwise indicated the movement is from a front rest position.

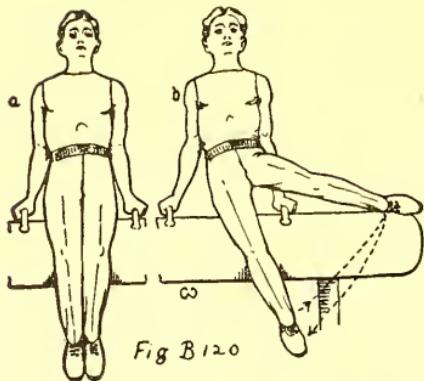


Fig. B 120

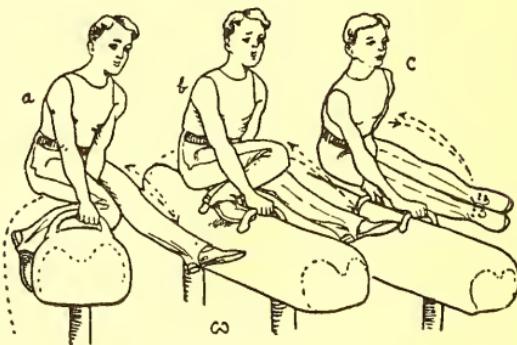


Fig. B 121

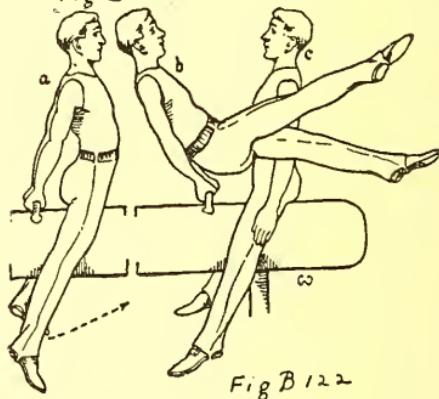
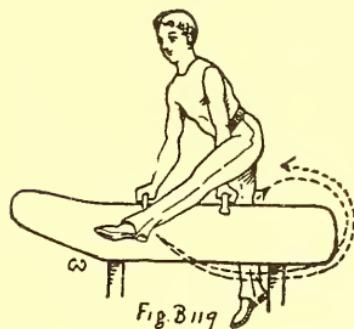


Fig. B 122

(1) *Front.* Executed in the direction one is facing. Figs. B119, B121 (a and b).



(2) *Back.* Opposite of front. Fig. B120.

(b) *Double Right*, is with both legs about right arm. *Double left*, is with both legs about the left arm. Fig. B121 (c).

f. *Scissors.* A simultaneous adduction of both thighs past the median line of the body, accompanied by a quarter or half turn of the body and coming to a riding position.

(a) *Front.* Performed at the end of or during a front swing. Fig. B122.

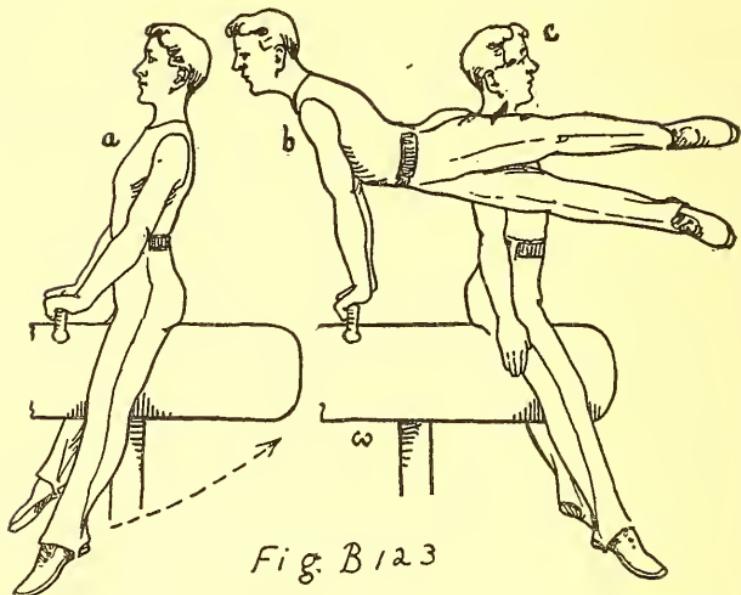


Fig. B 123

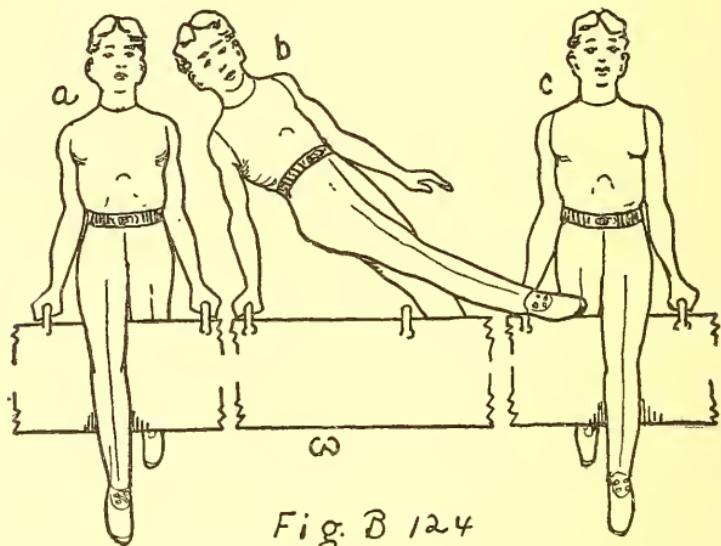


Fig. B 124

(b) *Back.* Performed at the end of or during a back swing. Fig. B123.

(c) *Scissors without Turn of Body.* Performed from the side riding seat (or rest) on the horse by swinging the legs sideways and changing their position simultaneously. In such cases, they are designated *forward scissors* when the upper leg moves forward, and *backward scissors* when the upper leg moves backward. They are also designated as *right* when the swing is to the right, and *left* when the swing is to the left. Fig. B124.

NOTE.—The scissors are also designated as right or left, according to the direction of the turn of the trunk.

g. *Screw Circles.* Leg circles from a front or back rest or from any of the riding seats, coming to either a riding position or immediately dismounting, accompanied by a  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$  or full turn of the body. During these circles the performer travels from one part to or over another part of the apparatus.

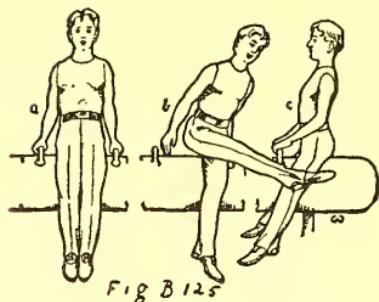


Fig. B 125

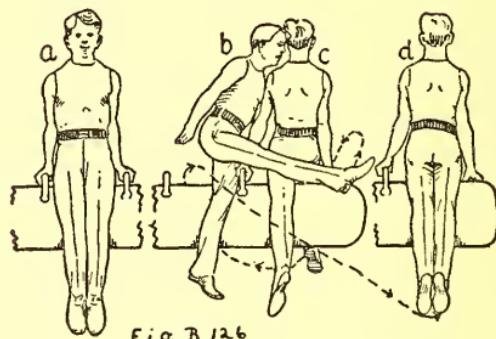


Fig. B 126

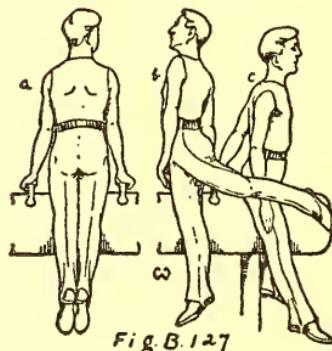


Fig. B 127

(1) *Front.*

(a) *Half.* The leg describes a half circle. Fig. B125.

(b) *Full.* The leg describes a full circle. Fig. B126.

(2) *Back.* Fig. B127.

(1) *Half.*

(2) *Full.*

NOTE.—Directions same as for leg circles.

3. VAULTS. A vault is a spring over an apparatus, from one or both feet with aid of one or both hands.

(1) *Flank.* The body is raised sideways to a horizontal position, the side of the body being toward the apparatus when passing over it. Fig. B128 (low flank vault left).

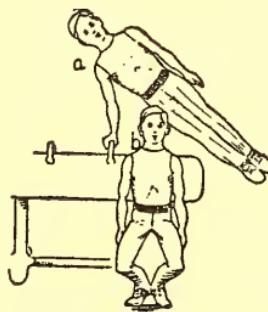


Fig. 128

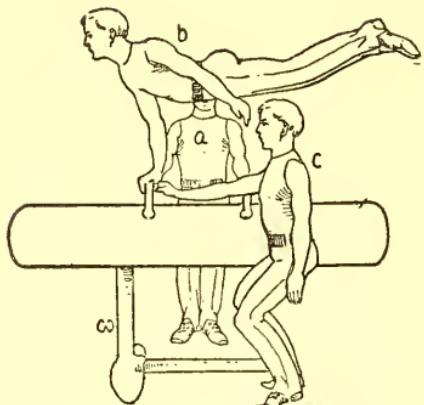


Fig. B129

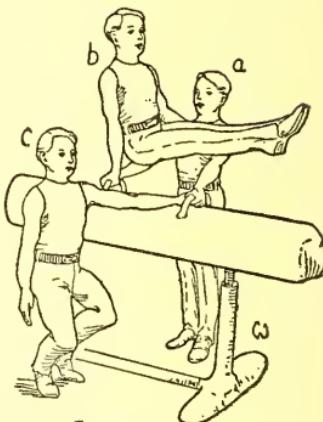


Fig. B130

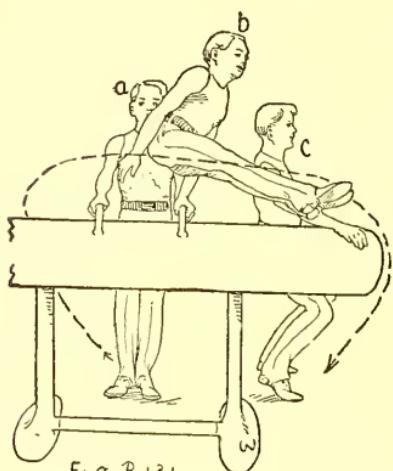


Fig. B131

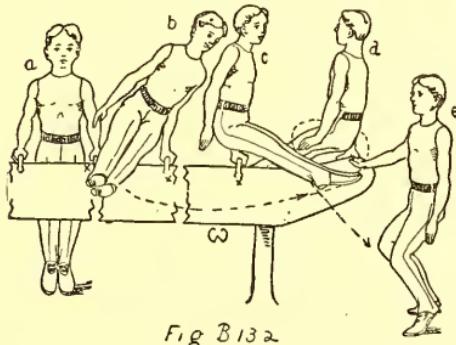
(2) *Front.* The body is raised sideways to or above the horizontal, making a quarter turn toward the apparatus in the rise, the front of the body being toward the apparatus while passing over it. Fig. B129.

(3) *Back.* The body rises sideways with a quarter turn away from the apparatus, the thighs being half flexed at the same time, the back of the thighs being toward the apparatus while passing over it.

(a) *Single.* When executed once over any part of the apparatus. Fig. B130.

(b) *Double.* When executed twice over one part of the apparatus or once each over two parts before dismounting. Fig. B131.

(c) *Triple.* When executed three times over one or more parts before dismounting. Fig. B132.



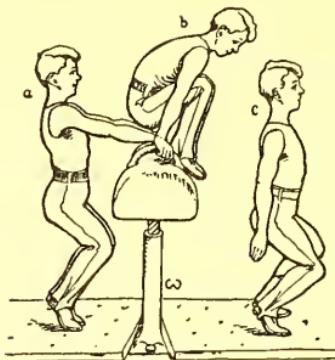


Fig. B 133

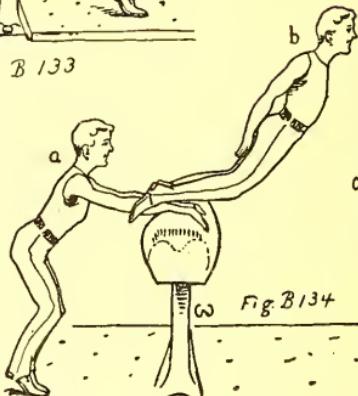


Fig. B 134

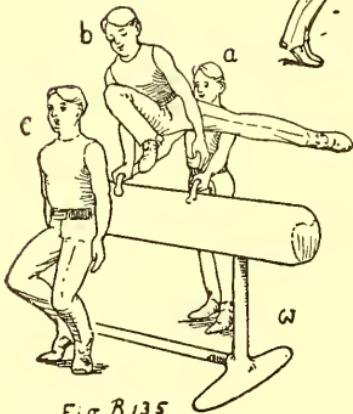


Fig. B 135

(4) *Squat.* The thighs and legs are flexed to the fullest extent between the arms while passing over the apparatus and may be:

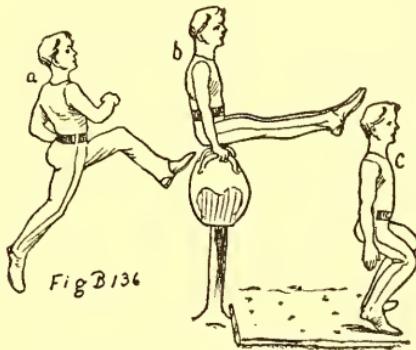
*a. Forward.* Fig. B133.

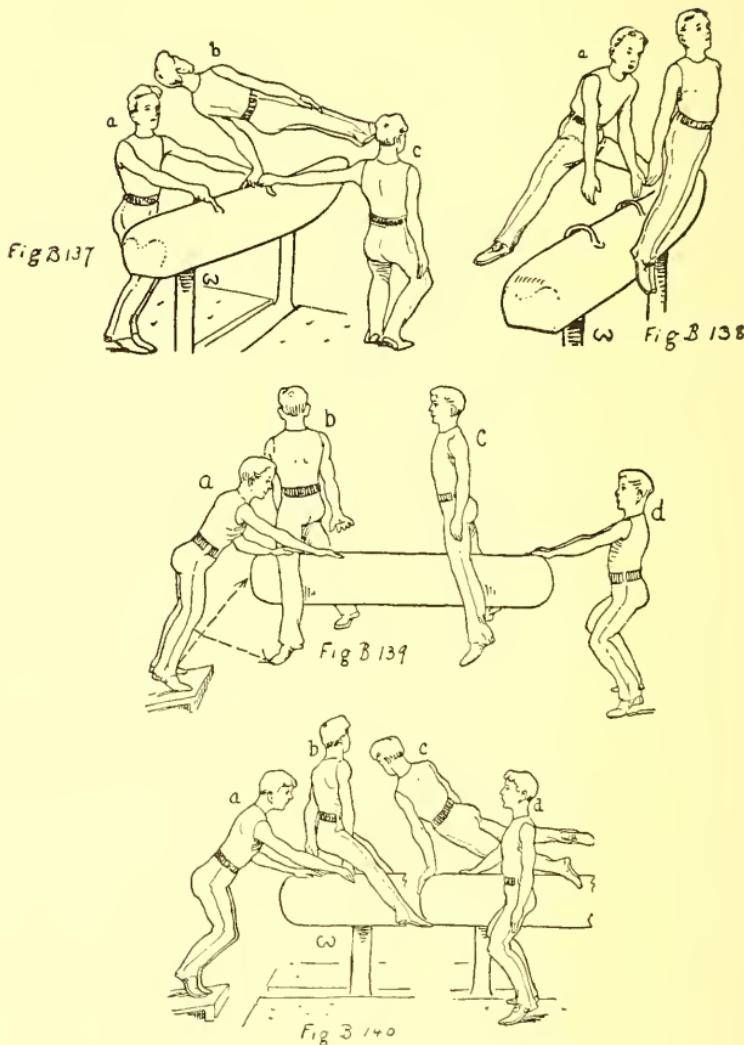
*b. Backward.* Executed by making a half turn of the body and going over the apparatus backward.

(5) *Sheep.* Same as squat, but the legs only are flexed. Fig. B134.

(6) *Wolf.* One thigh and leg are in the squat position, the other limb is extended to its own side. Fig. B135.

(7) *Thief.* A spring is made from one foot as for an ordinary leap, but the thighs are quickly flexed and feet placed forward in the rise and the hands placed on the apparatus as the body passes over it. Fig. B136.





(8) *Screw.* A vault with a continuous three-quarter turn of the body in the reverse direction of the side to which the vault is made, thighs fully extended throughout. When the body has been carried to the horizontal position above the horse it has made a half turn and is facing the near side of the apparatus, the remaining quarter turn being made during the descent on the far side. Fig. B137.

(9) *Straddle.* The thighs are abducted while passing over the apparatus and may be:

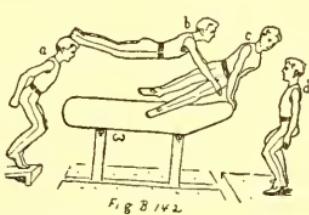
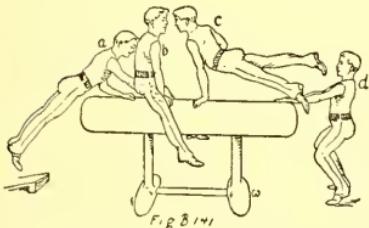
a. *Forward.* Fig. B138.

b. *Backward.* Executed by making a half turn of the body and passing over the apparatus backward. Fig. B139.

(10) *Scissors.* Over the long horse, long buck, etc., is a straddle forward, thighs flexed and feet placed forward in the rise, with a quarter or a half turn of the body, to a stand to the side of or opposite the far end of the apparatus. May be right or left, depending upon the turn of the body.

*Forward.* Figs. B140, B141.

*Backward.* Fig. B142.



NOTE.—The direction for vaults (1), (2), (3), (6) and (8) are determined as follows: When executed toward the right or left side of the body they are right or left vaults.

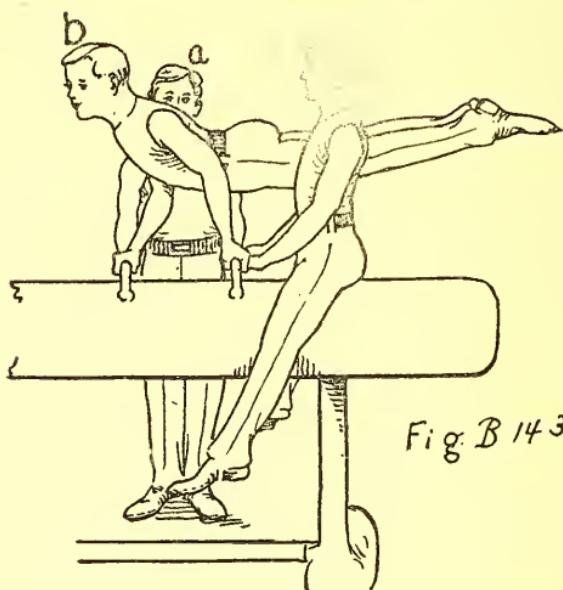


Fig. B 143

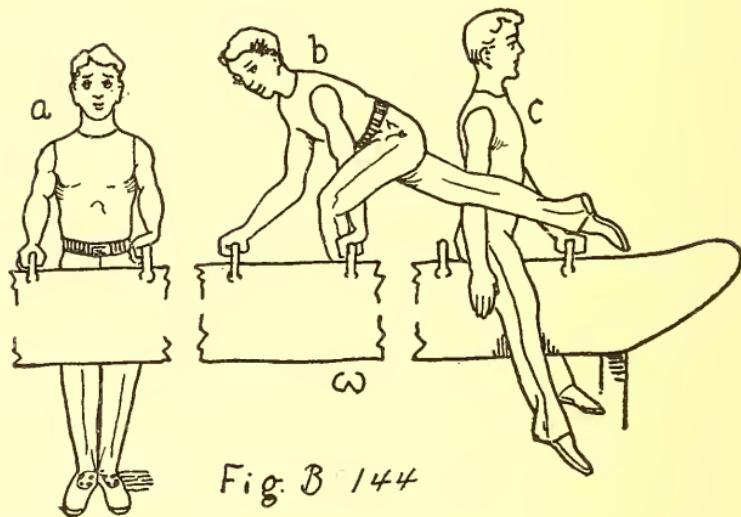


Fig. B 144

## 4. MISCELLANEOUS MOVEMENTS.

(1) *Approach.* The advance to the apparatus. It is started from an indicated point at a convenient distance from the near side (or end) and includes all movements up to the time the feet leave the floor.

(2) *Retreat.* The march from the apparatus, and includes all movements from the time the feet touch the floor on the dismount until the performer passes a specific point.

(3) *Mounts.* A mount is a spring from the floor, alighting upon the apparatus to any of the positions already described. Hands may or may not assist.

a. *Vault.* Vault movements, alighting upon the apparatus, hands assisting, and executed like the beginning of a vault as *Flank* (Fig. B143), *Front*, *Back*, *Squat* (forward or backward), *Wolf*, *Sheep*, *Thief*, *Screw*, *Straddle* and *Scissors*.

b. *Needle.* A movement on the side horse as follows: *Needle mount right* is a movement in which the right thigh and leg are flexed (squat position) and passed forward over the croup, around the right arm and over the saddle, the left leg at the same time is swung over the croup to the far side; the mount is finished by alighting in a riding seat in saddle. Fig. B144.

NOTE.—Direction for the above mounts is same as for vaults.

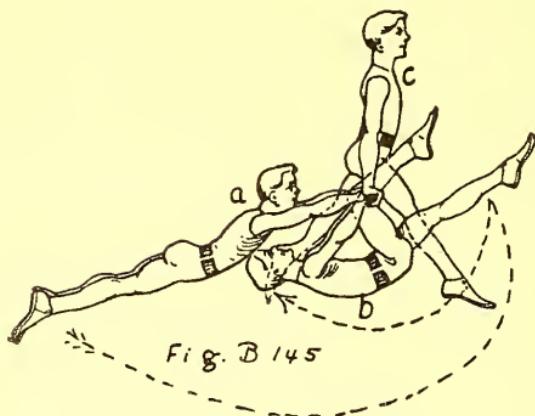


Fig. B 145

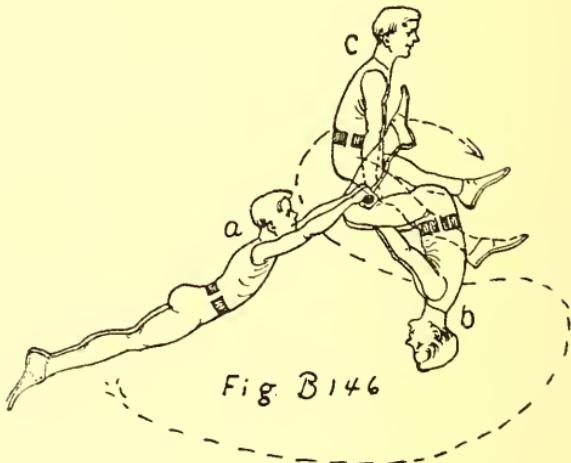


Fig. B 146

*c. Knee.* A movement in the side hang in which the thighs are flexed at the end of a front swing (as for an *upstart*), the leg or legs then passed under and over the bar, grasping it with the hocks, rising to a riding position on the bar.

*(a) Single.* With one leg passing:

(1) Between the hands. Fig. B145.

(2) To the outside of either hand.

*(b) Double.* With both legs passing simultaneously:

(1) Between the hands, Fig. B146,

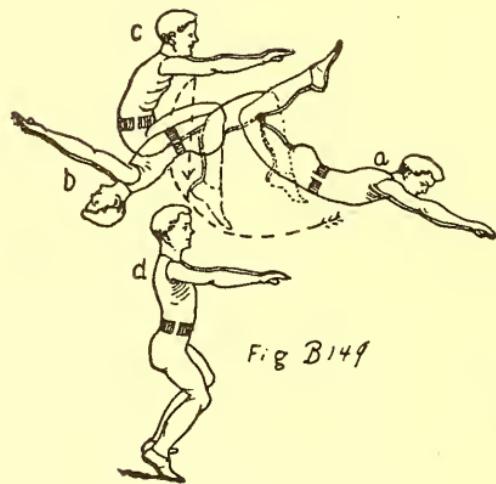
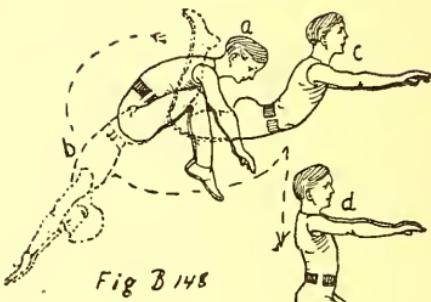
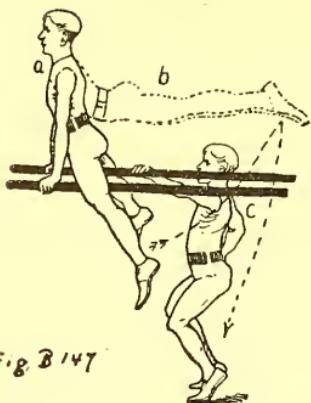
(2) To the outside of either hand,

(3) One leg between and the other outside of hands,

(4) Each leg to the outside of the hand on its own side (straddle movement).

*d. Mounts* without the hands assisting. From the floor to any position on the apparatus as a jump, hop, step or leap.

NOTE.—Nomenclature for jump, hop, step and leap will be found under mat work and tumbling, Section C, page 115.



(4) *Dismounts.* Movements from a position on the apparatus to the floor and are designated as follows:

a. *Vault.* Dismounts executed like the finish of the vaults already described. Fig. B147 (front dismount).

b. *Forward.* A movement forward to the floor.

c. *Backward.* A movement backward to the floor.

d. *Hock.* A dismount at the end of a swing in the hock hang and may be:

(a) *Front.* Dismount at the end of the forward swing. Fig. B149.

(b) *Back.* Dismount at the end of the backward swing. Fig. B148.

(c) *Still.* Dismount without a swing, sometimes called "snap-off." Fig. B150.

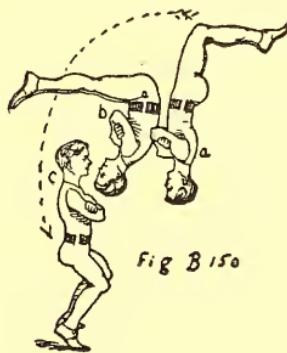
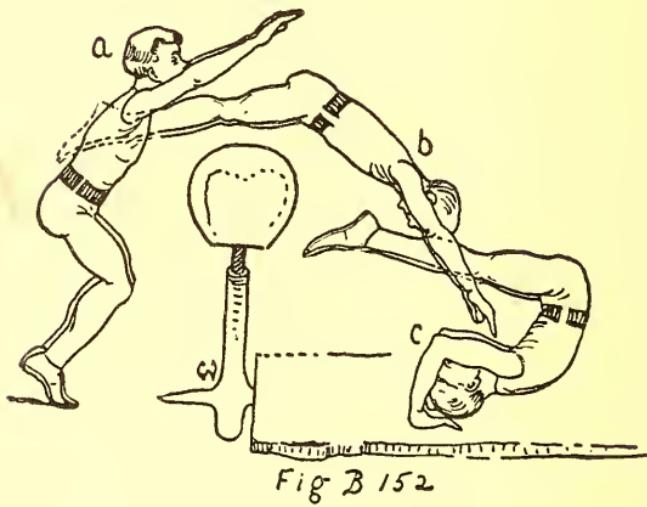
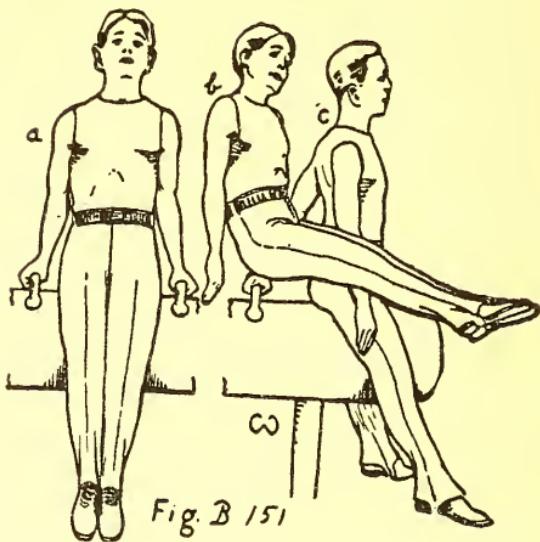


Fig. B150



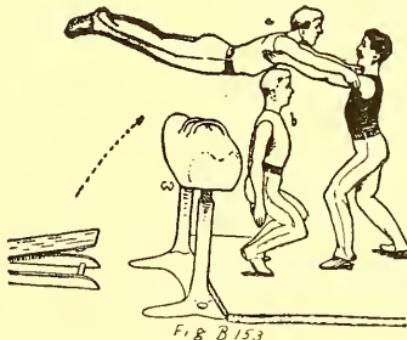
e. *Short Underswing.* Same as the movement from the high bar to the ground.

(5) *Traveling.* Exercises in which the individual makes progress on the apparatus either forward, backward, or to either side.

(6) *Vault Swing.* A vault movement, from one to another part of the apparatus. Fig. B151 represents a back vault swing. When followed immediately by a dismount it is a "vault swing dismount." Directions same as for leg circles.

(7) *Dive.* A spring from both feet, the body going over the apparatus head first, the alighting being upon the hands and shoulders and followed by a forward roll. Fig. B152.

(8) *Pike Jump.* A dive over an apparatus, but the alighting is made by placing the hands on the shoulders of an individual standing on the far side and who places his hands against the chest and below the shoulders of the performer. Fig. B153.



(9) *Cut-off.* A straddle movement of the thighs over one or both arms, hands releasing grasp, accompanied by a half or full body circle from a hang and may be:

a. *Back.* With a body back circle straddling one or both arms. Fig. B154.

b. *Front.* Thighs are flexed as for an upstart, the body is then circled forward, the legs straddling one or both arms. Fig. B155.

c. *Cut-off and Catch.* Same as (b), hands immediately regrasping without the feet touching the floor.

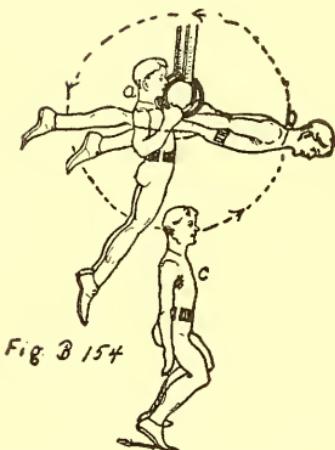


Fig. B 154

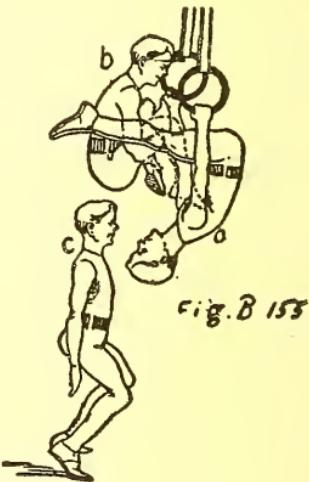


Fig. B 155

## C. MAT WORK AND TUMBLING

### MAT WORK.

#### I. GENERAL TERMS.

By mat work is meant such exercises as jumps, hops, runs, walks, etc., executed on mats.

#### II. DIRECTIONS.

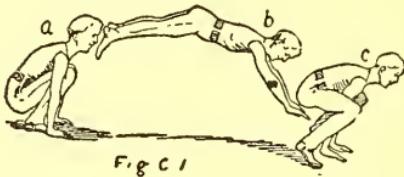
For directions see "Of Other Movements," page 4.

#### III. MOVEMENTS.

1. *Jump.* Springing from both feet and landing on one or both feet.
2. *Hop.* Springing from one foot and landing on same foot.
3. *Leap.* Springing from one foot and landing on both feet.
4. *Step.* Leaving the mat from one foot and landing on the other, and may be either a walking or running step.

NOTE.—These movements may be executed in any direction and may be preceded by a walk or a run.

5. *Frog Jump.* A movement in which the individual dives, landing on his hands, immediately flexes thighs and legs, and brings feet up to hands; knees may or may not be brought between arms.



a. *Forward.* Fig. C1.

b. *Backward.* In this movement the starting position is from a knee bend rest. The movement is then begun by extending thighs and legs, passing through a front rest position and bringing the hands immediately back to the feet as in the original starting position.

6. *Hand and Foot Travel.* A movement in which progress is made in any direction by using the hands and feet for locomotion. May be a walk or run with front of body or back toward the mat. Fig. C2.



Fig. C 2

7. *Leap Frog.* A movement in which one individual executes a straddle vault over one or more individuals.

- a. *Forward.*
- . b. *Backward.*

#### TUMBLING.

#### I. GENERAL TERMS.

In contradistinction to mat work the exercises in tumbling consist of upstarts and movements in which the individual describes a body circle about any of the axes or any plane of the body entirely or partly on the mat or free from the mat, with or without the aid of a co-worker; also balance movements.

#### II. DIRECTIONS.

See directions for circles in Gymnastic Nomenclature, page 3.

## III. MOVEMENTS.

A. Individual, i.e., without the aid of a co-worker.

## 1. BODY CIRCLES.

(1) *Rolls.* A circle executed by rolling on the mat with or without the aid of hands about the horizontal axis in the antero-posterior plane.

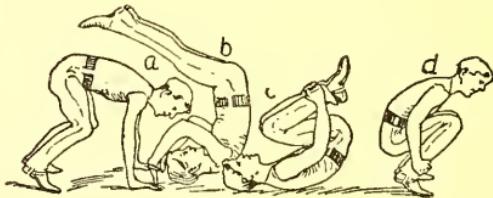


Fig. C3

a. *Forward.* Fig. C3.

b. *Backward.*

NOTE.—The hands may be placed, either at the beginning or at the end of or at both the beginning and the end of the movement, on the mat, hips, knees, overhead, behind back, between the legs, grasping the toes, etc. The thighs and legs are kept flexed throughout the exercise. In the more advanced form of executing the back roll, the thighs and legs are extended and the performer passes through a hand-balance movement.

(2) *Dive.* In this exercise no apparatus other than the mat is used. Fig. B152, page 112.

a. For distance.

b. For height.

(3) *Hand and Head Spring.* A circle executed by springing from one or both hands, from one or both feet, and from the head, and landing on one or both feet. The hands, head and feet only coming in contact with the mat.

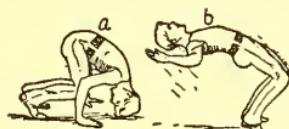


Fig. C4

a. *Forward.* Fig. C4.

b. *Backward.*

(4) *Hand Spring.* A circle executed by springing from one or both hands, from one or both feet, and landing on one or both feet. The hands and feet only coming in contact with the mat.

a. *Forward.* Fig. C5.

b. *Backward.* Fig. C6.

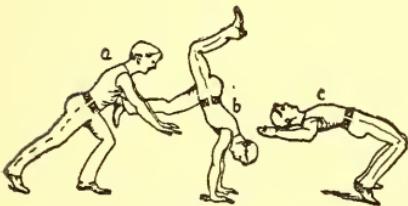


Fig. C5

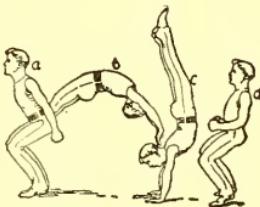
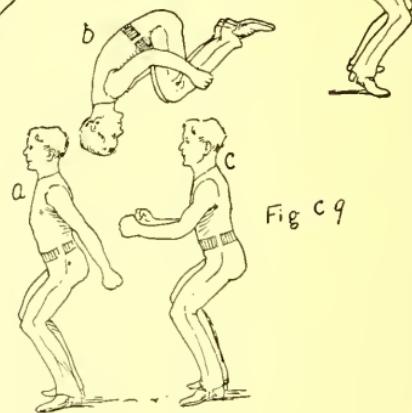
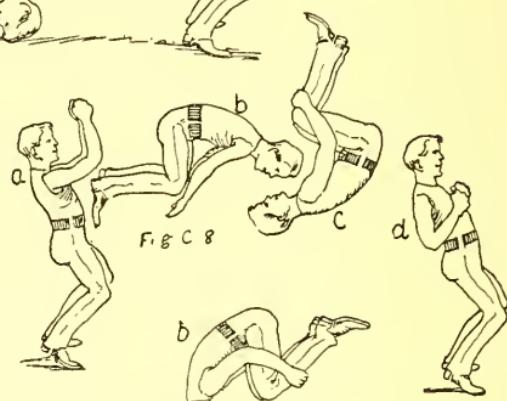
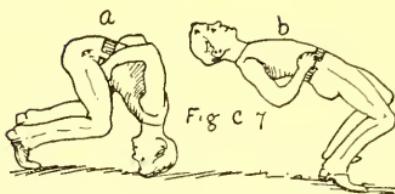


Fig. C6



(5) *Head Spring.* A circle executed by springing from the head, from one or both feet, and landing on one or both feet. The head and feet only coming in contact with the mat. Fig. C7.

NOTE.—Nos. 3, 4 and 5 may be executed from a run or stand.

(6) *Somersault.* A circle executed by springing from one or both feet and landing on one or both feet. The feet only coming in contact with the mat.

- a. *Forward.* Fig. C8.
- b. *Backward.* Fig. C9.

2. UPSTARTS. Movements similar to the ordinary upstart on the apparatus in the quick thigh flexion and extension; may be executed with or without the aid of the hands.

(1) *Ordinary.*

- a. With use of hands. Executed by rolling backwards, flexing thighs and raising hips from the mat, at the same time placing hands on mat near shoulders, then extending thighs forcibly (as in upstart on apparatus), at the same time pushing with hands and coming to a stand. May be executed by placing hands on thighs instead of overhead on the mat. Fig. C10.

This exercise may also be executed from the following positions:

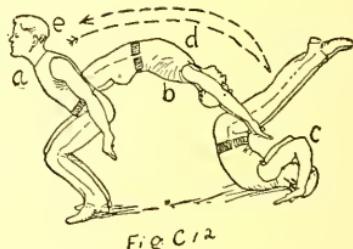
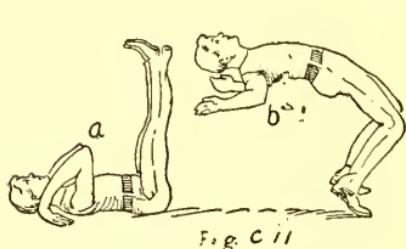
1. From head balance.
2. From hand balance.
3. From forearm balance.

When executed from either of these positions the individual rolls forward to a position on neck and shoulders, flexing thighs at the same time and executing an upstart to stand.

*b.* Without use of hands. Same as ordinary except that the hands are not used. Hands may be held at side horizontal, over head or folded on chest.

(2) *Still.* Similar to ordinary upstart except that hips are not raised from mat. Thighs flexed at right angles; should be executed from a stationary position. Fig. C11.

(3) *Drop Back.* Assume the full knee bend position. Spring back (as for back-hand spring) and land on hands and shoulders, then upstart to stand. Fig. C12.



### 3. BALANCE MOVEMENTS. Of the performer on the mat.

(1) *Head Balance.* Same as hand balance, except that weight of body is supported by head and with or without hands.

(2) *Forearm Balance.* Fig. B67, page 64.

(3) *Hand Balance.* Fig. B65, page 64.

B. Double, i.e., movements with the aid of a co-worker. The two men involved are the performer (top man) who executes the movements, and the thrower (under man) who assists the performer.

#### 1. VAULTS.

##### a. *Forward.*

(a) The performer assumes a stride stand position facing the thrower, who places his hands between the performer's thighs. The performer places his hands on the thrower's head or shoulders and leaps forward assisted by the thrower. Fig. C13.



Fig. C 13

NOTE.—The same movement can be executed, the thrower standing with his left or right side toward the performer and placing his left or right hand, between the performer's thighs.

(b) The performer assumes a supine position, with the thighs and legs flexed and spread. The thrower faces and places his left foot between the legs of the performer, grasps with his right and left hands the same hands of the performer. The hands will be crossed with the right above. The performer then springs upward and forward executing a straddle vault over thrower. Fig. C14. This movement may be modified as follows:



Fig. C 14

(1) The thrower may remain with his left side toward the performer throughout.

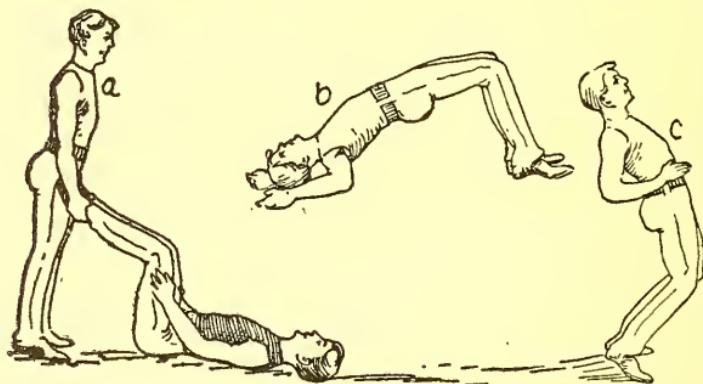
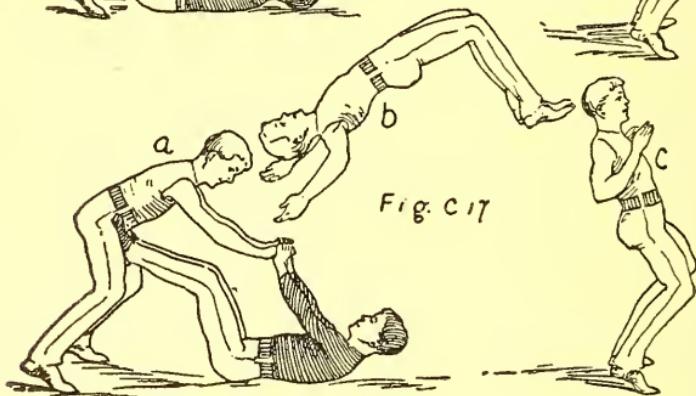
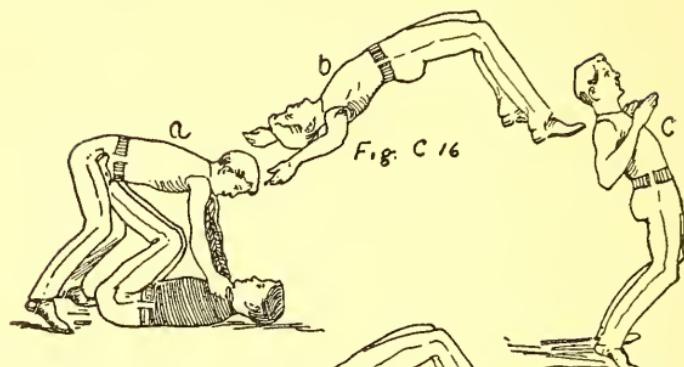
(2) The thrower may make a half turn to right as the performer springs.

(3) Same as (2) except that the performer vaults between the arms and over the head of thrower.

*b. Backward.*

(a) The performer assumes the position of "attention" with his back toward the thrower. The thrower grasps the hand of the performer who jumps upward, flexes thighs and legs and vaults backward between the arms and over the head of the thrower. Fig. C15.





**2. BODY CIRCLES.**

(1) *Hand Springs.* The thrower lying on his back with thighs flexed as in upstart.

*a. Forward.*

(a) The performer faces and stands in front of and close to the flexed thighs of the thrower, bends forward and grasps the thrower's shoulders. The thrower also grasps the shoulders of the performer, places his feet either side of the groin of the performer, who springs forward as in a hand spring, and is then kicked forward to a stand on mat. Fig. C16.

(b) The same can be done by the two individuals grasping only hands instead of shoulders. Fig. C17.

(c) Also done by the aid only of the thrower's feet, the performer placing his hands on the thrower's knees or ankles as he springs forward. Fig. C18.

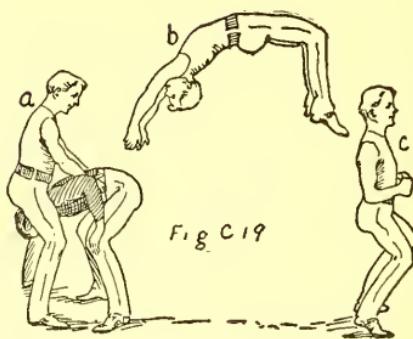


Fig. C 19

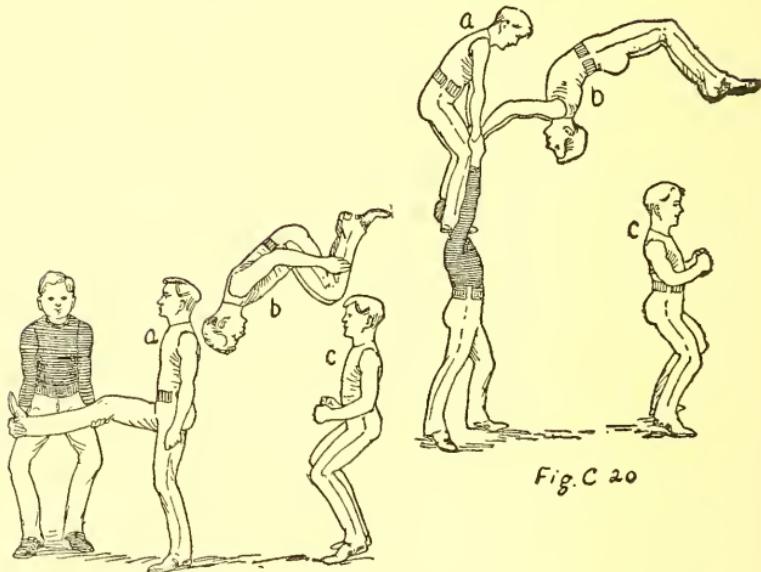


Fig. C 20

Fig. C 21

(d) A hand spring can be executed if the thrower stands in front of and faces the performer. The thrower then places his head between the legs of the performer, who places his hands on the thrower's back and springs forward as for a hand spring; the thrower assists by a timely lift in tossing the performer to a stand through a forward hand spring. Fig. C19.

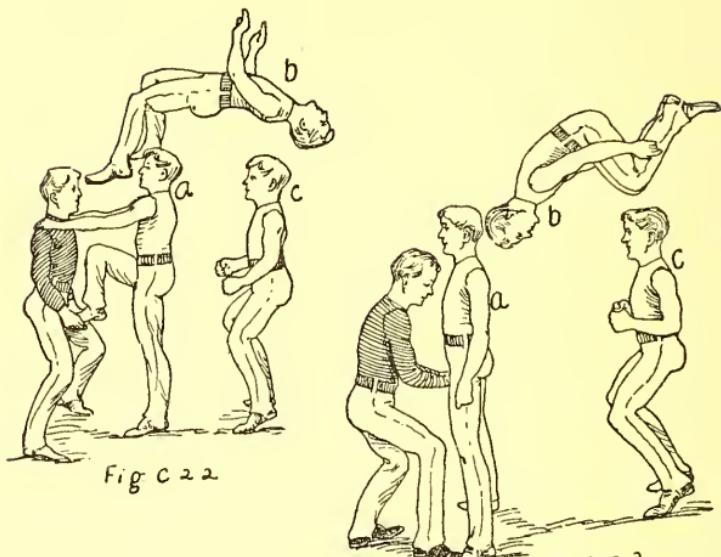
(e) From a stride stand on thrower's shoulder. The performer stands on shoulders of the thrower, whose hands he grasps, and then makes a hand spring to mat. Fig. C20.

(2) *Somersaults.* Both the thrower and the performer standing. (Leg and thigh lifts.)

NOTE.—In this group we begin with the backward body circles, because they are not so difficult as those forward.

a. *Backward.*

(a) The performer stands on one foot and flexes other thigh, which is grasped by the thrower, who uses it as a lever in assisting the performer in executing the somersault. The thrower may stand either at the side of or in front of the performer. Fig. C21.



(b) The thrower assumes a stride stand position, with the fingers of both hands interlocked and held in front of thighs. The performer steps with one foot into the locked hands of the thrower, extends that leg to full length, arches backward and at the same time the thrower by a timely lift tosses the performer through a back circle to a stand. This is sometimes known as the "Pitchback." Fig. C22.

(c) The performer and thrower in stride stand position facing each other; the thrower thrusts his arms between the legs of the performer, who then springs as for back somersault and is tossed over by the thrower. Fig. C23.

*b. Forward.*

(a) The performer stands on one foot and flexes the other leg, which is grasped by the thrower who stands either behind or to the side of the performer and by a timely lift assists the performer in executing the somersault. Fig. C24.

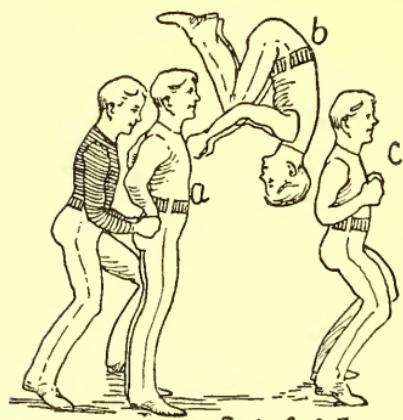


Fig. C 25

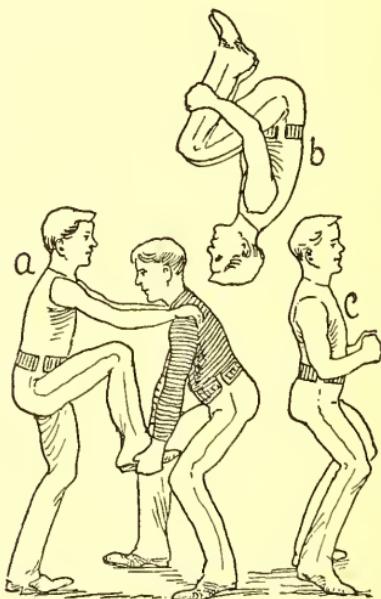


Fig. C 26

(b) The performer stands in front of and with his back toward the thrower and with his arms at the sides as in "attention." The thrower grasps the hands of the performer, who springs as for a somersault, and is lifted at the proper time by the thrower and assisted in executing a forward circle to mat. Fig. C25.

NOTE.—A backward somersault can be executed from this position if the performer faces the thrower. The performer then holds his arms a trifle in front and springs as for a back somersault.

(c) Position as (b) under (2) a. Fig. C22, page 130. The performer, however, springs forward as for a forward somersault and is tossed over the head of the thrower and thus executes a forward circle. Fig. C26.

(d) From a stride stand on thrower's shoulders.

a. *Backward.* Same as from mat.

b. *Forward.* Same as from mat.

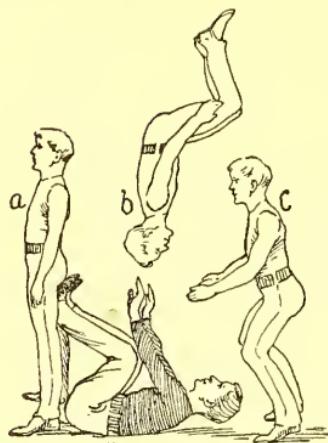


Fig. C 27

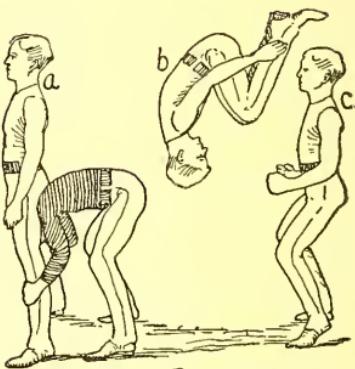


Fig. C 28

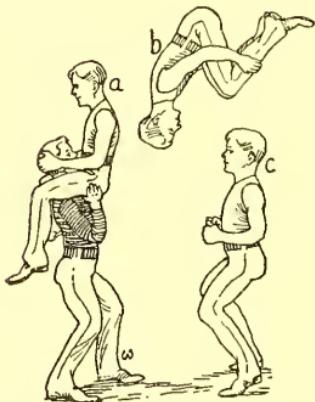


Fig. C 29

(3) *Rolls.*a. *Backward.*

(a) The thrower lying on his back with thighs flexed as in upstart. The performer stands with his back toward and close to the thighs of the thrower, who places his feet on the buttocks of the performer, who then arches backward and is kicked backward to a stand on the mat. The thrower may or may not grasp the shoulders of the performer during the movement. Fig. C27.

(b) The performer is in stride stand position with the thrower behind, who places his head between the legs of the performer. The performer then rolls backward and is tossed to a stand on mat by the thrower raising up quickly at the proper time. Fig. C28.

(c) The performer astride the shoulders of and facing the thrower. The thrower places his hands on the performer's buttocks, who then arches backward and is assisted in making a body circle to mat by the thrower, who pushes upward against the performer's buttocks. Fig. C29.

(d) The thrower and performer stand back to back. The thrower reaches up over his shoulders and grasps the hands of the performer, who jumps upward and rolls through a back circle over the head of the thrower to a stand in front. Fig. C30.

(e) The performer assumes a hand balance position with his thighs astride the hips of the thrower, who stands with his back toward the performer. The thrower then presses down on the heels of the performer, who rolls through a back circle over the back of the thrower to a stand in front. Fig. C31.

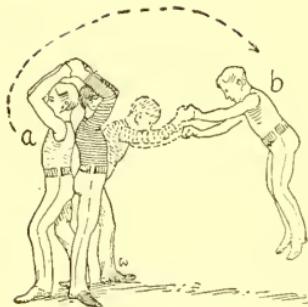


Fig. C 30

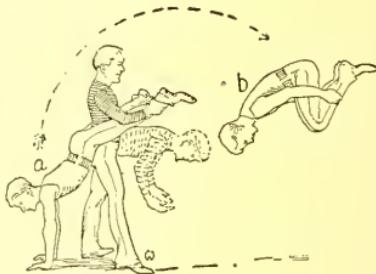


Fig. C 31

### 3. BALANCE MOVEMENTS—of the performer on the thrower.

Head and hand balance upon the head, hands or shoulders of the thrower, the thrower standing.

#### (1) *Hand Balance.*

- (a) On the shoulders of the thrower.
- (b) On the hands of the thrower.
- (c) On the head of the thrower.

NOTE.—In (a) the thrower also grasps the shoulders of the performer. In (b) the hands of the thrower should be held at full length overhead.

#### (2) *Head Balance.*

- (a) On the head of the performer.
- (b) On the hands of the performer.

NOTE.—Many balance movements can be executed with the thrower lying in a supine position on the mat.

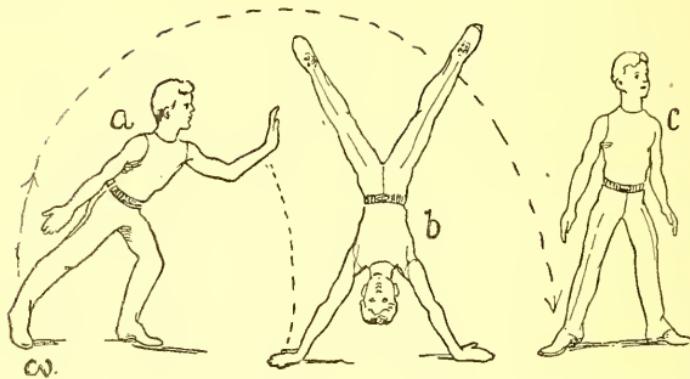


Fig. C 32

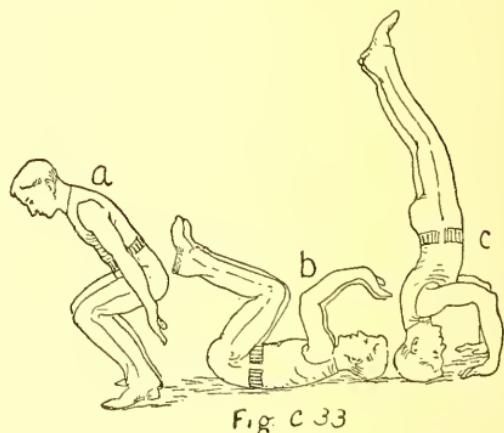


Fig. C 33

## IV. MISCELLANEOUS MOVEMENTS.

1. *Cart Wheel.* A body circle about the antero-posterior axis in the lateral plane.

- a. Left.* Fig. C32.
- b. Right.*

Is executed by bending to the left, placing left hand on the floor, at the same time abducting right leg and swinging it over head, followed immediately by the left leg; the right hand is now placed on the floor, the legs swing over to the left side and the right foot placed first on the floor followed by the left foot and coming to a stand, thus completing a circle in the lateral plane. Arms and legs should be kept spread throughout so that the hands and feet represent 4 points of contact—equal distance apart like a wheel of 4 spokes.

2. *Back Roll*—to head balance with or without using hands. From stand or supine position. Fig. C33.
3. *Back Roll*—to hand balance. From stand or supine position.

4. *Back Roll*—to prone position. Roll back as in 2 and 3 without using hands, rolling over left or right shoulder, turning head to opposite side, arms kept at side horizontals throughout.
5. Same as 4 except that the arms are kept at the side as in attention and the head is not turned to one side.
6. *The Toss Between the Legs*. The performer assumes a supine position, flexes thighs and legs and folds his arms tightly across the legs, bringing knees close to chin. This position should be held rigidly. The thrower then assumes a stride stand position facing from and slightly in front of the performer, whose heels he grasps, lifts up and forward and tosses the performer completely over (back circle) to a stand. The performer may be tossed by two throwers, each standing to one side and grasping a heel. Fig. C34.

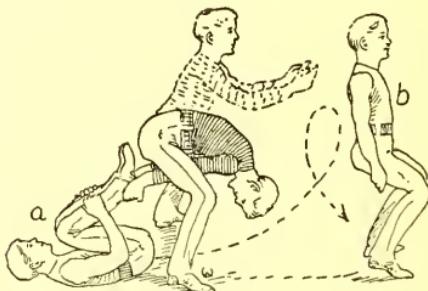


Fig C 34

7. *Head Throw.* The performer stands behind and facing the thrower, places his head over either the right or left shoulder of the thrower with both hands on that shoulder. The thrower reaches over with both hands and grasps the back of the head of the performer. The performer springs as for a forward hand spring and is tossed forward by the thrower to a stand. Fig. C35.



8. *Toss over Head.* The performer stands with his back toward the thrower. The thrower then grasps the hips of the performer, who jumps upward and is tossed backward over the head of the thrower through a back circle to stand behind the thrower. Fig. C36.

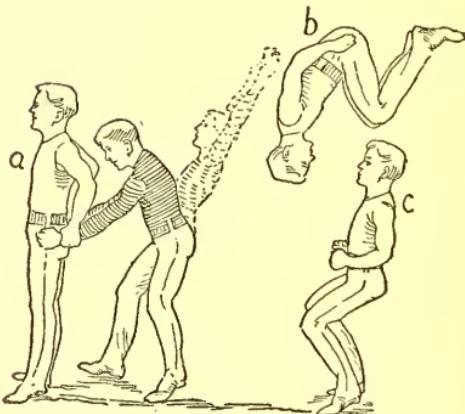


Fig. C'36

## D. INDIAN CLUBS

This nomenclature is for ordinary mass work. The nomenclature for movements such as the "snake," etc., used in fancy club swinging, is not given. The terminology for movements of the upper limbs, as described in the earlier pages of the nomenclature, has been followed as closely as possible and new terms introduced only when necessary.

It is important to remember that the terms "swing," "circle," apply primarily to the movements of the club and not to the arms, for it is evident that the arms must move in order to move the clubs. In some cases a swing of the club may involve a swing or circle of the entire upper limb.

### I. GENERAL TERMS.

1. Division of the upper limbs.  
(See page 1.)
2. Axes.  
(See page 1.)
3. Planes.  
(See page 2.)

## II. POSITIONS.

The starting position for the Indian club movements may be either with—

1. Clubs held in front of and close to the chest opposite the shoulders. (This is known as the key position.) Fig. D1.
2. Clubs held at side horizontals in line with forearm.
3. Clubs held at front horizontals in line with forearm.
4. Clubs held over head in line with forearm.
5. Clubs held at side of thighs in line with forearm.

In this nomenclature, it is assumed that all the movements are begun from the key position, viz., clubs opposite the shoulders and close to the chest.



Fig. D1

## III. DIRECTIONS.

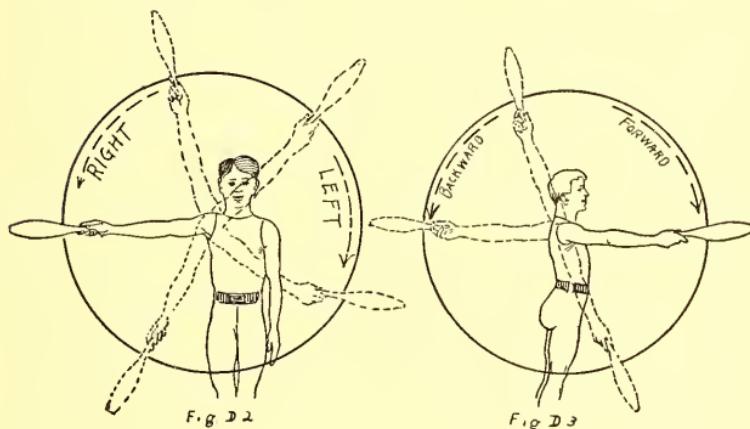
1. For circles (see pages 3, 4, 23).
2. For swings (see pages 4, 25).

NOTE.—The direction of any movement is determined by the axis about, and the plane in which the club moves.

## IV. CIRCLES.

Movements in which the club describes a circle.

1. Arm. The fixed point is at the shoulder, the entire upper limb and club describing a circle.
  - a. In the lateral plane (about the antero-posterior axis). Fig. D2.
  - (1) Right. (2) Left.
  - b. In the antero-posterior plane (about the horizontal axis). Fig. D3.



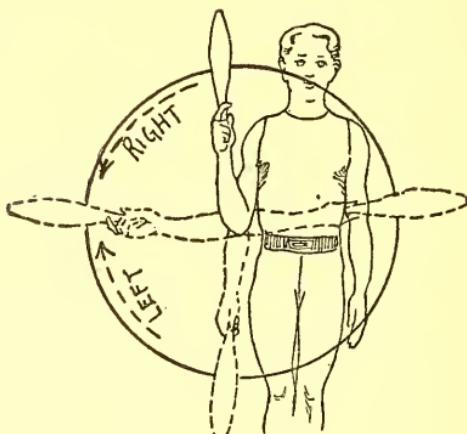


Fig. D 4

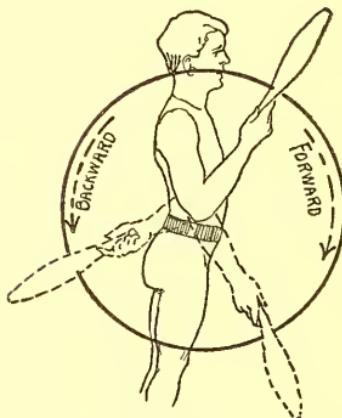


Fig. D 5

(1) Forward. (2) Backward.

2. Forearm. The fixed point is at the elbow, the forearm and club describing a circle. Upper arm is moved as little as possible.

*a.* In the lateral plane (about the antero-posterior axis). Fig. D4.

(1) Right. (2) Left.

*b.* In the antero-posterior plane (about the horizontal axis). Fig. D5.

(1) Forward. (2) Backward.

NOTE.—The forearm circles in the antero-posterior plane are not used very much.

3. Hand. The fixed point is at the wrist, the hand and club describing a circle. The upper arm and the forearm are, of course, involved and may describe either a swing or circle.

*a.* In the lateral plane.

(1) Right. (2) Left.

NOTE.—These hand circles may be in front of hips, behind the hips, at side horizontals, overhead, in front of the same or opposite shoulder, above and behind the same or opposite shoulder, or behind and below opposite shoulder, also about the lower extremities. Figs. D6 to D22.

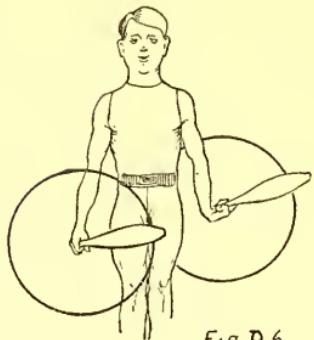


Fig D 6

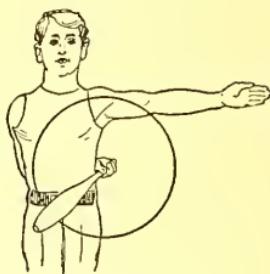


Fig D 7

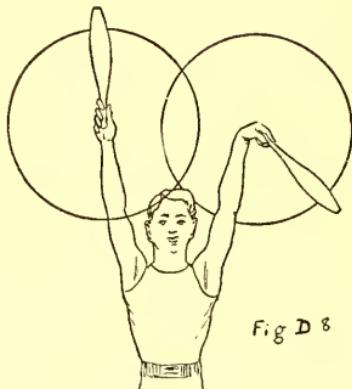


Fig D 8

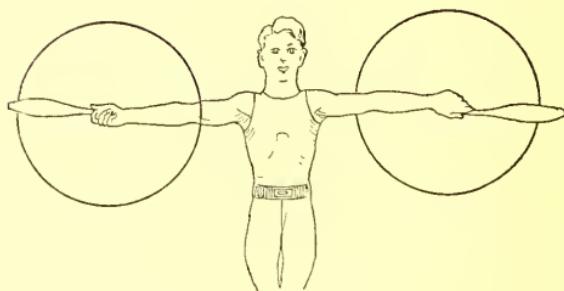


Fig D 9



Fig. D 10



Fig. D 11

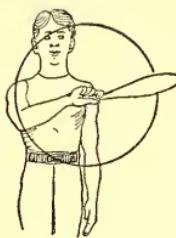


Fig. D 12



Fig. D 13



Fig. D 14

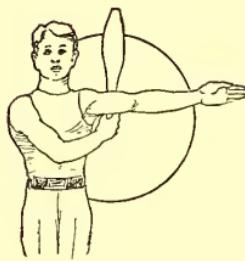


Fig. D 15



Fig. D 16

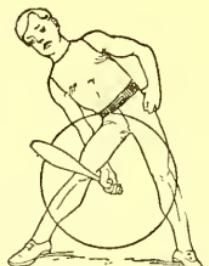


Fig. D 17



Fig. D 18

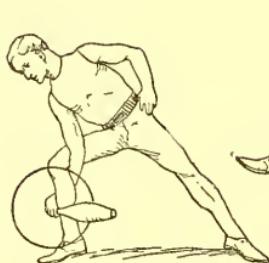


Fig. D 19

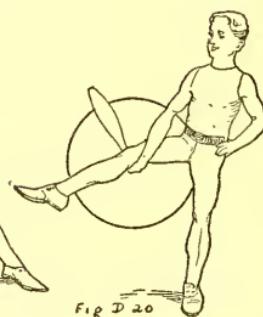


Fig. D 20

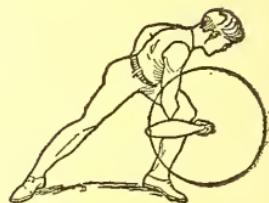


Fig. D 21

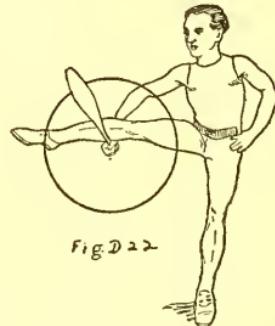


Fig. D 22

b. In the antero-posterior plane.

(1) Forward. (2) Backward.

NOTE.—These hand circles may be at the shoulder, at the side of thighs at front horizontals or overhead. Figs. D23 to D30.

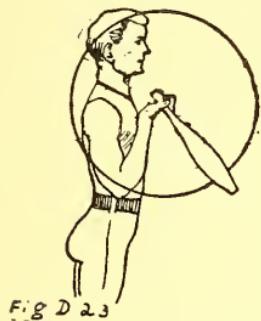


Fig. D 23

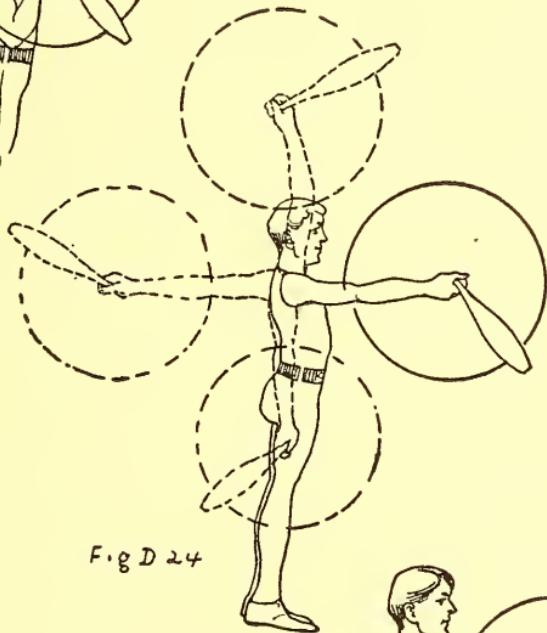


Fig. D 24

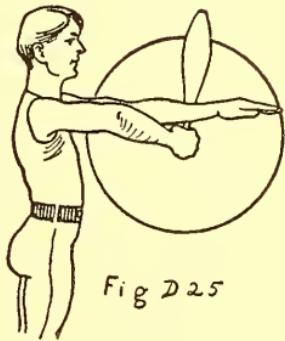


Fig. D 25

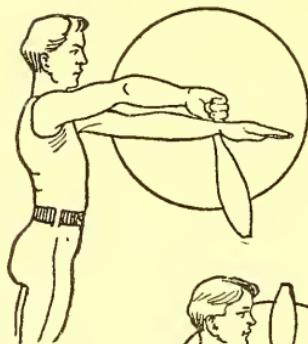


Fig. D 26

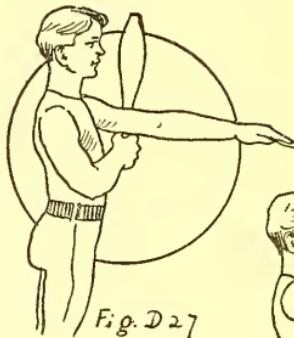


Fig. D 27

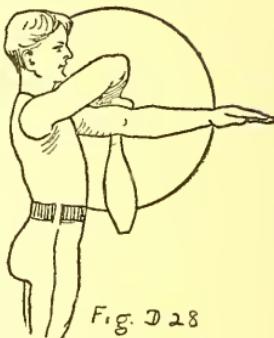


Fig. D 28

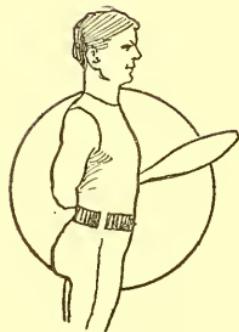


Fig. D 29

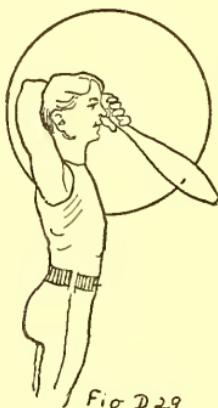
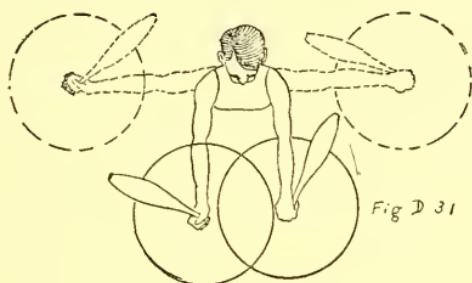


Fig. D 29

c. In the horizontal plane.

(1) Right. (2) Left.

NOTE.—These hand circles are executed while the arms are in or passing through the front horizontal position and may be above or below the forearm. Fig. D31.



## V. SWINGS.

Movements in which the club describes a fraction of a circle.

NOTE.—Direction same as for circles.

1. Arm. The fixed point is at the shoulder; the entire upper limb and club moves through a fraction of a circle.
  - a. In the lateral plane. Fig. D32.
    - (1) Right.
    - (2) Left.
  - b. In the antero-posterior plane.
    - (1) Forward.
    - (2) Backward.
2. Forearm. The fixed point is at the elbow; the forearm and club moves through a fraction of a circle.
  - a. In the lateral plane. Fig. D33.
    - (1) Right.
    - (2) Left.
3. Hand. The fixed point is at the wrist; the club moves through a fraction of a circle. As in hand circles, the upper arm and forearm are involved to a less or greater degree and may describe a swing or a circle.
  - a. In the lateral plane. Fig. D34.
    - (1) Right.
    - (2) Left.

NOTE.—These hand swings may be executed in front of the chest, in front of the face, overhead, or behind the head.

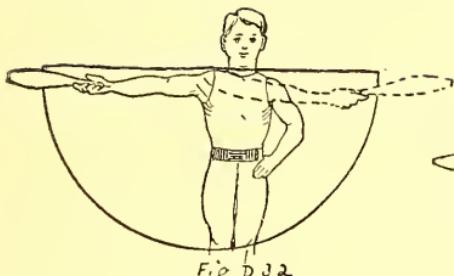


Fig D32

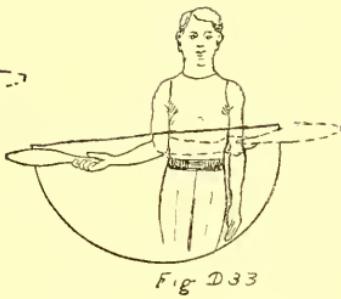


Fig D33

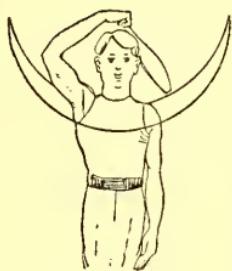


Fig D34

## MISCELLANEOUS.

## 1. Directions.

- a. All single club movements when possible, and unless otherwise specified, should begin with the left club to the left.
- b. Double movements should begin to the left.

## 2. Single. One club only to be used.

## 3. Double. Both clubs in the same direction at the same time.

## 4. Simultaneous. Both clubs at the same time, but in opposite directions.

## 5. Alternations. To change the direction or movement of the clubs.

- a. With one club. To alternate when using one club means to change the direction or movement of that club.

- b. With two clubs. To alternate when using two clubs means to change the direction or movements of both clubs at the same time.

## 6. Continuous movements. Movements in which the clubs are not brought back to the starting position after the completion of a single evolution, but are kept in continuous motion for two or more counts and may be single, double or simultaneous swings or circles. Example, the "windmill."

7. Continuous alternation. (Both clubs are used in the exercise.) Alternating movements in which the second club starts on its course before the first club has completed its movement, thus keeping behind the first club in count throughout the exercise. These are sometimes called "follow movements."

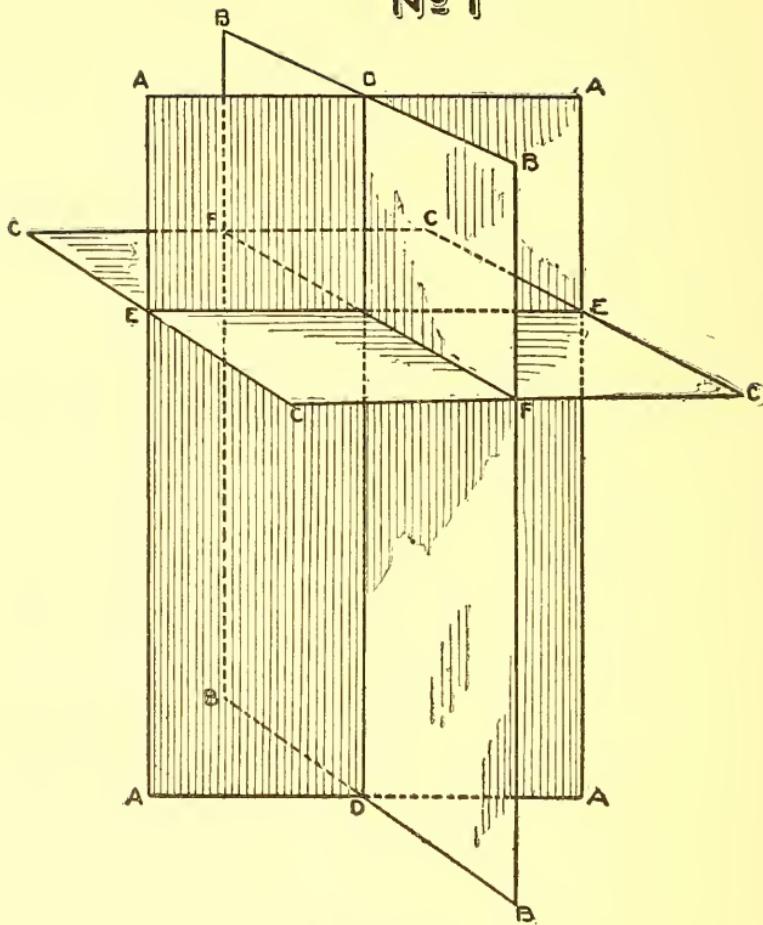
#### ABBREVIATIONS.

L	Left.
R	Right.
Single	One club.
Double	Both clubs.
L L	Left club to left.
L R	Left club to right.
R R	Right club to right.
R L	Right club to left.
Double L	Both clubs to left.
Double R	Both clubs to right.
Simultaneous	L R and R L, Left club to R and right club to L.



# APPENDIX

№ 1



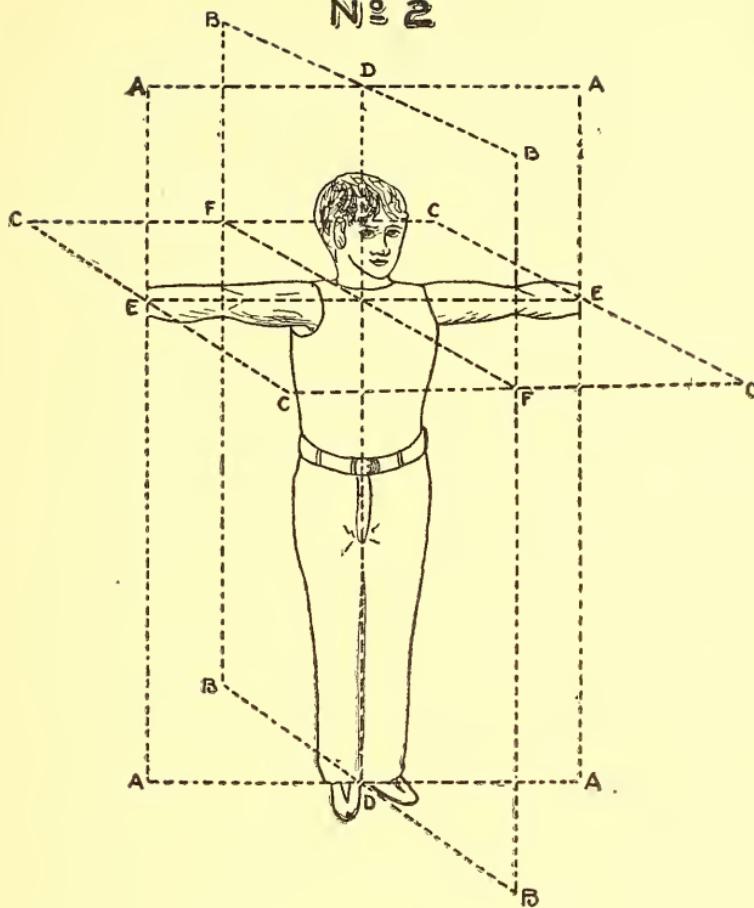
**PLANES**

A-A-A-A = LATERAL PLANE  
B-B-B-B = ANTERO-POSTERIOR PLANE  
C-C-C-C = HORIZONTAL PLANE.

**AXES**

D-D = VERTICAL AXIS  
E-E = HORIZONTAL AXIS  
F-F = ANTERO-POSTERIOR AXIS.

Nº 2



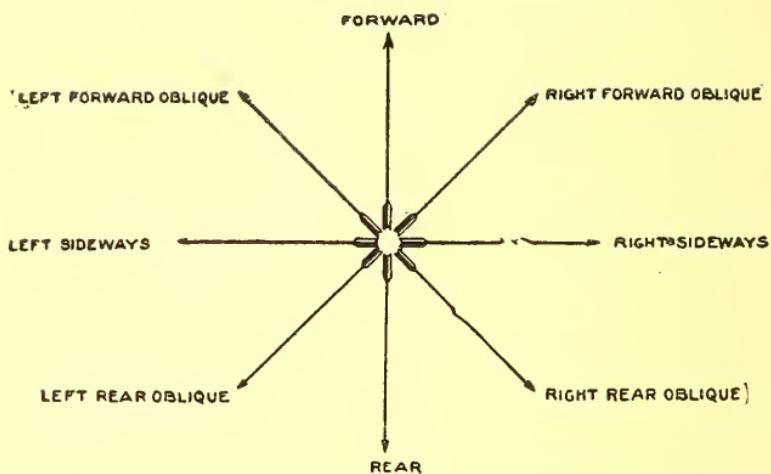
#### PLANES

A-A-A-A = LATERAL PLANE  
B-B-B-B = ANTERO-POSTERIOR PLANE  
C-C-C-C = HORIZONTAL PLANE

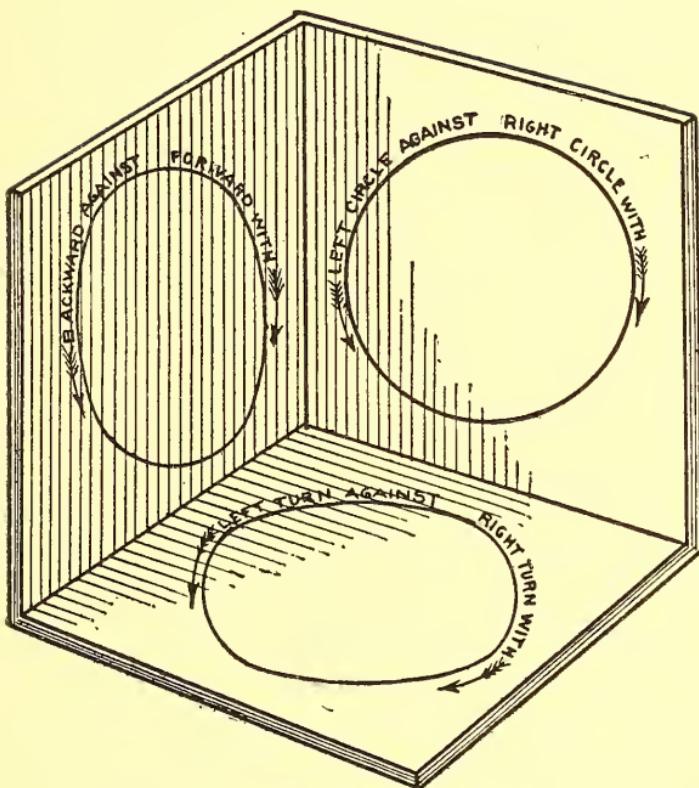
#### AXES

D-D = VERTICAL AXIS  
E-E = HORIZONTAL AXIS  
F-F = ANTERO-POSTERIOR AXIS.

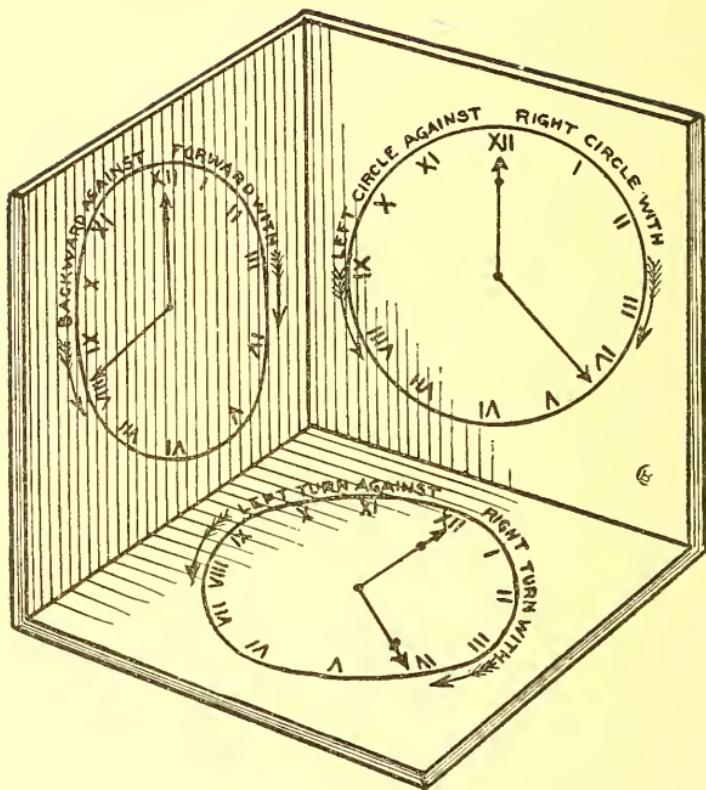
No 3



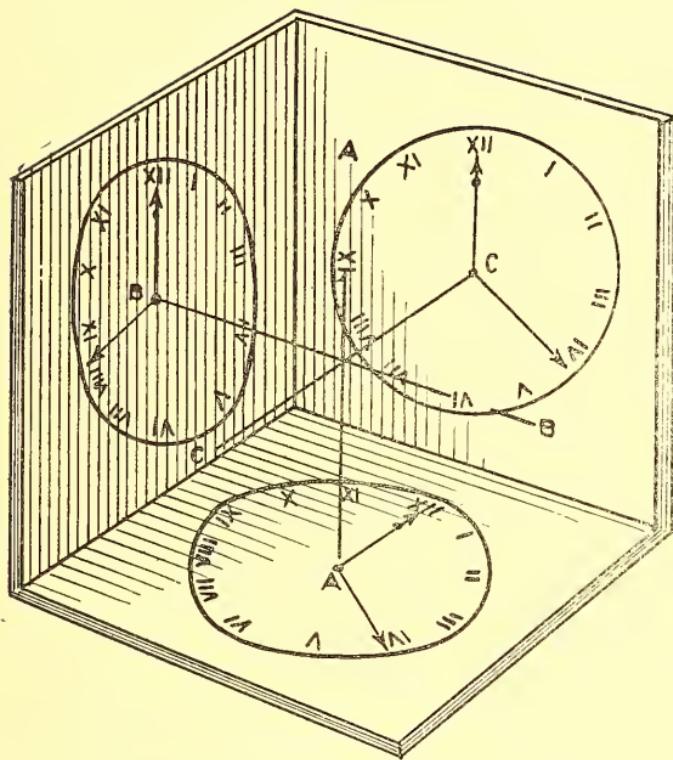
# Nº 4



# Nº 5



Nº 6



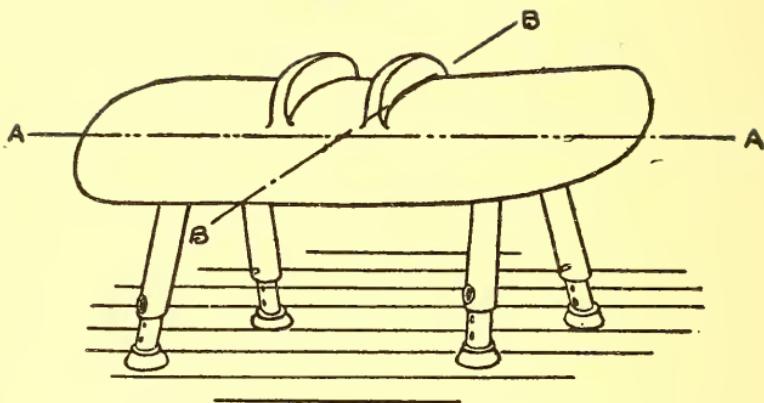
AXES

A-A = VERTICAL AXIS

B-B = HORIZONTAL AXIS

C-C = ANTERO-POSTERIOR AXIS.

N<sup>o</sup> 7



## AXES

A-A = LONG AXIS  
B-B = SHORT AXIS.



DEC 3 1908



LIBRARY OF CONGRESS



0 029 714 213 6